

OTTAWA

<u>Speaker</u>	<u>Agency</u>	<u>Street</u>	<u>City</u>	<u>Postal Code</u>
Father Kent Doe	Anglican Diocese of Ottawa	71 Bronson Ave.	Ottawa, Ont.	
Alan and Betty Studd	Anglican Church of Canada		Kingston, Ont.	
Meeka Wilson	Baffin Region Inuit Assoc.			
Jane Thompson	Bell's Corners United Church		Bell's Corners, Ont.	
Andrew Roman	Canadian Association in Support of Native People	251 Laurier Ave. W.	Ottawa, Ont.	K1P 5J6
Mr. Grant Maxwell	Canadian Catholic Conference	90 Peron Ave.	Ottawa, Ont.	
C.J. McGee	Canadian Council of Professional Engineers			
Ted Mosquin	Canadian Nature Federation	46 Elgin St., Rm. 40	Ottawa, Ont.	
Mr. F.J. Bregha	Canadian Wildlife Federation and the Committee for Justice & Liberty	1673 Carling Ave.	Ottawa, Ont.	K2A 1C4
Charles Brabazon	Civil Liberties Association	Box 1217, Stn. B	Ottawa, Ont.	K1P 5R3
Archbishop James A. Walton	Diocese of Moosonee			
Dave McLay	Ecumenical Citizens Group	97 Beverly Street	Kingston, Ont.	
A.W. Birnie	Industrial Gas Users Assoc.			
J. Amagoalik	Inuit Tapirisat	222 Somerset St. W.	Ottawa, Ont.	

OTTAWA

<u>Speaker</u>	<u>Agency</u>	<u>Street</u>	<u>City</u>	<u>Postal Code</u>
Bill Edmonds	Labrador Inuit Association	Naim, Labrador		
Dr. E. Newbery	Laurentian University	Ramsey Lake Road	Sudbury, Ont.	
James Dumont	Native Studies Dept.			
Edna Maniowabi				
Arthur Solomon				
Susanne Loewen	Group of Six, Dept. of Anthropology	Carleton University	Ottawa, Ont.	
Del Anaquod	Nat. Assn. Friendship Centre	200 Cooper St., #2	Ottawa, Ont.	K2P 0G1
Roger Obonson				
Yvonne Allen-Icison				
Fred Jobin	Native Council of Canada	77 Metcalfe St., #200	Ottawa, Ont.	K1P 5L6
George Manuel	National Indian Brotherhood	102 Bank St.	Ottawa, Ont.	
Hans Ragnar Mathison				
Stuart Leggatt	New Democratic Party	Confederation Bldg. House of Commons	Ottawa, Ont.	
Bill Shead	Office of Native Employment	300 Laurier Ave. W. Rm. 1008	Ottawa, Ont.	
Chief Ken Opie	306 London Terrace		Ottawa, Ont.	K1K 2W2
Doris May Oulton				
Theo Hills	Oxfam Canada	251 Laurier Ave. W.	Ottawa, Ont.	K1P 5J6

OTTAWA

<u>Speaker</u>	<u>Agency</u>	<u>Street</u>	<u>City</u>	<u>Postal Code</u>
Wilf Wilkinson	Pastoral Council of the Roman Catholic Archdiocese of Kingston	279 Johnson St.	Kingston, Ont.	
G. Harrison	Pollution Probe	53 Queen St.	Ottawa, Ont.	K1P 5C5
Rev. Dr. G. Russell Hatton	Project North	154 Glenrose Ave.	Toronto, Ont.	M4T 1K8
Bishop Adolphe Proulx	Project North	154 Glenrose Ave.	Toronto, Ont.	M4T 1K8
Kai Reitan		P.O. Box 168, Stn. A	Ottawa, Ont.	K1N 8V2
A.G. Salvin		353 Frank St.	Ottawa, Ont.	
John Shepard Dr. Roger Voyer	Science Council Committee on Northern Development	150 Kent Street	Ottawa, Ont.	K1P 5P4
Dr. H.T. Schwarz		Tuktoyaktuk		
Jim Shearer				
Linda Newell	Solar Energy Society, Ottawa Chapter	44 Dufferin Rd.	Ottawa, Ont.	
Mrs. L. Jordan	St. John the Divine	5 Miriam Ave.	Ottawa, Ont.	K2G 0L2
Alec Fisher	Steel Company of Canada			
George Swinton				
Dr. H.L. Pottle	Ten Thousand Days	256 King Edward Ave.	Ottawa, Ont.	
Mrs. Mabel Christy	Trinity United Church	657 Highland Ave.	Ottawa, Ont.	K2A 2K5



Digitized by the Internet Archive
in 2025 with funding from
University of Toronto

<https://archive.org/details/31761120620265>

OTTAWA

<u>Speaker</u>	<u>Agency</u>	<u>Street</u>	<u>City</u>	<u>Postal Code</u>
Dr. Eleanor Sutherland Jacques Lapoint	Westboro United Church World University Service of Canada	450 Churchill Ave. N. 222-800 Wellington	Ottawa, Ont. Ottawa, Ont.	K1R 6K7
David Seaborn Suzanna van den Heuvel	YWCA Cross-Cultural Study Group	251 Laurier West, Room 904	Ottawa, Ont.	

June 28th, 1976.

MEMO TO: Don Gibson

FROM: Darryl Carter

RE: Southern Hearings - Berger Inquiry

Ottawa - June 3rd, 1976 10:00 a.m.

John Amagoalik,
Inuit Tapirisat of Canada

- have never said they are opposed to all development
- often do not like the way development has proceeded where others get the benefit and they pay the costs in terms of destruction of their land and life style
- some development is inevitable but they want some say in the way it takes place
- the ITC land claims proposal to the Cabinet is a land sharing proposal not a "claim" since they already own the land
- their rights must be settled before the pipeline
- The disruption in Alaska is a frightening prospect and they are looking to the Berger Inquiry for recommendations and a land settlement to protect their land
- they have no desire to withhold supplies of natural gas if they are urgently needed in the south but this is being doubted by many people; i.e. whether or not there is an energy shortage
- energy must be conserved

Rev. Dr. Russell Hatton,
Archbishop James A. Watton and
Bishop Adolphe Proulx,
Project North and Inter-Church Project on Northern Development

- called for a moratorium to consider the moral and ethical questions related to the Mackenzie Valley Pipeline
- Canadians must change their present life style which is based on a consumer instead of conserver mentality.

--more rational development would include (a) more public discussion; (b) land claims settlement; (c) native control over future; (d) environmental protection based on independent studies; (e) regulation on extraction of non-renewable resources

--they are sponsoring a two-year project staffed by Mr. and Mrs. McCullam, the authors of "This Land is Not for Sale" and the objectives of the project are justice for native people; secondly stewardship of resources

A.W. Birnie
Industrial Gas Users Association

--represents 17 major industrial users in eastern Canada concerned about gas supply beyond the 1980's

--frontier areas must be connected as soon as possible

--discontinuance of exports will do little to extend the supply beyond 1984

--Berger's recommendations and the terms and conditions should not be over restrictive

Dr. Theodore Mosquin,
Canadian Nature Federation

--not opposed in principal to Mackenzie Valley Pipeline

--concerned that Government not following its established priorities, i.e. it is only prompting natural resource exploration

--we must live in harmony with nature and can learn from the natives in this respect

--opposed to Beaufort Sea drilling

--IBP site must be preserved

--opposed to Arctic Gas route through Alaskan Arctic Wildlife Range, therefore prefers Fairbanks Route and Mackenzie Delta Route along the Dempster Highway

Dr. Pimlott spoke on behalf of CARC. Opposed to the Minister of Indian and Northern Affairs wearing three hats, ie as Minister of Northern Development, Minister of Indian Affairs and also as guardian of the Arctic Environment.

Bud Hollands made a statement on behalf of Arctic Gas dealing with training and employment describing the Nortran Program and pointing out that they have found that there are many northerners who want the jobs.

Hollingworth announced that Foothills was amending their application to provide for summer construction of the northern 50 miles of the route and they would provide evidence and reports on this as soon as possible.

Ottawa - June 3rd, 1976 - 2:00 p.m.

Charles Brabozon,
President,
Ottawa Civil Liberties Association

- support native people's efforts to be heard
- natives should be given the right of self determination
- doubts that there is an energy crisis
- the pipeline is not meeting the needs of northern development
- there should be a moratorium

I was not present for the remainder of the witnesses that afternoon but Pierre Genest was.

Ottawa - June 4th, 1976 - 10:00 a.m.

John Shepherd
and Dr. Roger Voyer,
Representing the Science Council of Canada,
Committee on Northern Development

- their studies indicate that rapid development tends to leave the natives out
- commends the Berger Inquiry but terms of reference should have included the power to decide yes or no on the pipeline
- need monitoring bodies represented of the people and consulting with them

the following information is being furnished to you for your information and guidance. This information is being furnished to you for your information and guidance.

On the basis of the information furnished to me, I am of the opinion that the information furnished to you is reliable and accurate. I am of the opinion that the information furnished to you is reliable and accurate.

Very truly yours,
[Signature]

Enclosed for you are the following documents:
1. [Document 1]
2. [Document 2]
3. [Document 3]

I am of the opinion that the information furnished to you is reliable and accurate. I am of the opinion that the information furnished to you is reliable and accurate.

On the basis of the information furnished to me, I am of the opinion that the information furnished to you is reliable and accurate. I am of the opinion that the information furnished to you is reliable and accurate.

I am of the opinion that the information furnished to you is reliable and accurate. I am of the opinion that the information furnished to you is reliable and accurate.

Very truly yours,
[Signature]

Very truly yours,
[Signature]

Enclosed for you are the following documents:
1. [Document 1]
2. [Document 2]
3. [Document 3]

I am of the opinion that the information furnished to you is reliable and accurate. I am of the opinion that the information furnished to you is reliable and accurate.

On the basis of the information furnished to me, I am of the opinion that the information furnished to you is reliable and accurate. I am of the opinion that the information furnished to you is reliable and accurate.

I am of the opinion that the information furnished to you is reliable and accurate. I am of the opinion that the information furnished to you is reliable and accurate.

--it is a major concern that Canadian content be maximized if the pipeline goes ahead

--scientists take certain calculated risks but others shouldn't have to face the consequences unless compensation is guaranteed

Berger referred to their evidence about scientists and risks and stated that this Inquiry had encountered a number of disputes among scientists for example on frost heave and caribou. He noted that every caribou expert in north america he thought had given evidence and offered a suggestion that perhaps the frost heave controversy was a result of the present state of scientific knowledge in that area.

Jacques Lapointe,
World University Service of Canada

--they have passed the resolution supporting in principal the Dene land claim

--not interested in partisan politics but rather the survival of people and they reject the melting pot theory

Mrs. L. Jordan,
St. John the Divine Parish

--support Anglican Church position on moratorium and native rights

Linda Newell,
Solar Energy Society of Canada

--prompting solar energy and energy conservation

C. J. McGee,
Canadian Council of Professional Engineers

--support early approval of Mackenzie Valley Pipeline permitting proper planning and the controlled reduction on the energy crisis

--our live style is better today as a result of contributions from engineers

The Judge noted that he had heard evidence from many distinguished engineers and named Dr. Hardy in particular and he also stated that the Inquiry itself had engineers on its staff.

Roger Obonsowin, National Association of Friendship Centres
Del Anaquod,
Yvonne Allen Kisoun, President NWT Youth Association

- reaffirmed its support for land claims settlement
- loss of culture, community and identity has lead to the natives migrating to urban centres in the south with resulting alcohol problems etc.
- supporting National Association of Friendship Centres
- relying on Berger's recommendations to protect their land

Theo Hills,
Oxfam

- learned about injustices and poverty from the third world
- colonialism is being practiced in Canada on the native people
- agreed to fund any land claims studies
- must be land claims settlement before pipeline
- has been appointed full time staff member to act as liaison with NWT Indian Brotherhood
- the land and the right of self determination are important for the northern native people

Ottawa - June 4th, 1976 - 2:00 p.m.

Alec Fisher,
Stelco

- agrees with NEB that gas demand will outstrip supply in the future without supply from the northern areas
- alternative is dependence on imports or reduction in industrial growth and employment
- natural gas has special qualities necessary in the production of steel and is clean burning hence has a less impact on the environment

--Stelco is presently increasing capacity and there will therefore be enough steel available from Canadian sources to supply the normal market without the disruptions as well as 50% of any northern pipeline project

--it has designed inspection and x-ray systems into its new mill

The Judge had asked them if they had read the statement that the Steel Workers had made in Yellowknife that it was not possible to supply the pipe in Canada. Mr. Fisher replied yes and it was their intention to rebut that statement in their evidence.

Jane Thompson,
Bells' Corner United Church

--the third world has suffered from colonialism even though there have been some benefits such as in the field of medicine and the native people have the same problem now

--there must be a land claims settlement before the pipeline

Kai Reitan

--had worked for the Alberta Government in 1971 and done a critique of the transportation corridor study prepared by Pemcan CNR for the Arctic Gas Project

--there are many problems in building on the muskeg

Dr. H. L. Pottle,
10,000 Days

--must change our attitudes to get away from colonialism

--stewardship of energy resources is necessary

--energy crisis may be contrived

--there must be a moratorium

Fred Jobin,
Native Council of Canada

- representing the Metis and Non-Status Indians
- very synical about whether what the native people say has any effect
- there is a social deterioration in the Mackenzie Valley but some hope with the resurgence of the Dene nation concept
- he could get publicity by talking about terrorism but they realize they do not have sufficient numbers of people
- natives are not separatists but he is losing his rationality with frustrations and will have to decide soon whether it is necessary to use violence
- the land claims settlement is necessary because pipeline will rip through the Mackenzie Valley people like a tornado
- natives want access to education and communication to allow them to develop

Stuart Leggatt,
MP, Representing NDP Party

- Berger's terms of reference should be expanded to investigate to the Alcan Route
- land claims settlement before pipeline
- support Wally Firth's position that benefits will be short term and the detriments will out weigh them
- environmentally the north slope will be unacceptably impacted upon
- there should be a delay to provide an opportunity to consider alternatives (not nuclear)

Bill Shead,
Office of Native Employment

- seconded from the public service commission
- attempting to involve natives in decision making positions in the Government but at present the percentages are very small
- the lack of participation in Government jobs is also apparent in the professions and in industry because of strict standards in schools and protective labour unions

Alan G. Salvin,

- exploration of Arctic Petroleum is premature and natural gas should be used for feed stock value and use imported oil for fuel
- could use a smaller pipeline for feed stock and construction could proceed without land claim settlement because it should be subject to the same right of expropriation of all other areas
- the question is public good and minimal disruption

David McLay,
Ecumenical Citizens Group of Kingston

- the Baptistis Convention is likely to pass a resolution supporting the natives obtaining a just settlement of land claims and halting development in the meantime
- they are prepared to commit themselves to make the necessary sacrifices

Wilf Wilkinson,
Pastoral Council of the Kingston RC Diocese

- support Church's stand on native rights
- support moratorium
- doesn't accept energy crisis and must look for alternative methods, e.g. producing fertilizers so necessary to third world countries

Alan and Betty Studd,
Anglican Diocese of Ontario (Kingston)

- support Project North policy calling for just treatment of natives and stewardship of resources
- must change our life style
- supports moratorium

Father Kent Doe,
Native Affairs Work Group for Diocese of Ottawa

- the Government's plan has been to eliminate native people by assimilation
- while the Inquiry is listening, other forces, e.g. oil and gas industry are at work in the north
- the Dene declaration is the best starting point for a land claims settlement
- Anglican missionaries may have done harm but they are now learning to listen which the corporations should learn to do

Ottawa - June 4th, 1976 - 8:00 p.m.

Dr. Herbert T. Schwarz

- medical doctor sometimes of Tuktoyaktuk
- has experienced the harmful change of the north where people used to be happy living their traditional ways but now with white workers coming in there are problems with drunkenness etc.

Sussanne Loewen,
Anthropolgy Student

- development must not be rushed
- opposed to Arctic Gas proposal to go through Arctic Wildlife Range
- opposed to route along the Mackenzie Valley
- prefer Fairbanks Corridor if the pipeline must be built
- should be a single regulatory body

Mabel Christie,
Trinity United Church of Ottawa

- supports native people in their land claims

Dr. E. Newbery, Native Studies Dept. University of Sudbury

- must change to more humanitarian life style and communal living and insure environmental protection

James Dumont

--natives have a special relationship to the land and a responsibility to perserve it

Art Solomon,
American Indian Movement Spiritual Advisor

--we have legends of white man coming to the land and destroying it after which peace returns

Dr. Sutherland,
Westboro United Church

--must listen to natives and deal fairly with them in reaching a land claims settlement

Doris May Oulton

--impact may be too great for the northerners and amount to genocide

--Arctic Gas should have done the same amount of socio-economic study as environmental

--Robert Blair should have been aware of the social issues before he went to the community hearings

--Berger's mandate assumes a pipeline but the northern people have given him a mandate to oppose it

Meeka Wilson,
Baffin Region Inuit Association

--development doesn't offer much to the natives and there must be no pipeline before land claims settlement

--don't want special status, they can make it on their own if they are only allowed to

--the people in the south want to improve their standard of living with the north resources but do the native people have to suffer as a result?

Jim Shearer

--technical logical society always attempts assimilation but the results are disastrous because it imposes its set of values on the minority

George Swinton

--supports land claims settlement before development

--has learned from 20 years association with natives that they have a different value system

--the north is as much an energy user as the south, if not more

--we should declare war on wastages of resources and distruction of cultural resources; the pipeline is a common problem not an enemy

MACKENZIE VALLEY PIPELINE INQUIRY

BRANCH OFFICE:

Empire Building
124 O'Connor Street, #502
Ottawa, Ontario K1P 5M9

Telephone: (613) 235-6159
Telex: 053-3693

COMMISSIONER

Mr. Justice Thomas R. Berger

HEADQUARTERS:

Resources Building
5009-51st Street,
P.O. Box 2817
Yellowknife, N.W.T. X0E 1H0

Telephone: (403) 873-3580
Telex: 034-45552

OTTAWA, ONTARIO

Thursday, June 3, 1980

- Room 115
Amch*
- Amasoolik*
1. Inuit Tapirisat - *John Amasoolik (sp?)*
 - 2.a Rev. Dr. G. Russell Hatton, Project North *National Office Anglican Ch. of Cda*
 - 2.b Right Rev. James A. Watton, Bishop of Moosonee,
Ontario House of Bishops (Anglican)
 - 2.c Bishop Adolph Proulx, Canadian Catholic Conference,
Episcopal Commission for Social Affairs
Archbishop Schutt - Primate Ang. Church Cda Dr. Donald Macdonald
 3. A. W. Birnie, Industrial Gas Users Association
 4. Ted Mosquin, Canadian Nature Federation
 5. Charles Brabazon, President, Civil Liberties Association
 6. F.J. Bregha, Canadian Wildlife Federation
 7. Canadian Council on Social Development

MACKENZIE VALLEY PIPELINE INQUIRY

BRANCH OFFICE:

Empire Building
124 O'Connor Street, #502
Ottawa, Ontario K1P 5M9

Telephone: (613) 235-6159
Telex: 053-3693

COMMISSIONER

Mr. Justice Thomas R. Berger

HEADQUARTERS:

Resources Building
5009-51st Street,
P.O. Box 2817
Yellowknife, N.W.T. X0E 1H0

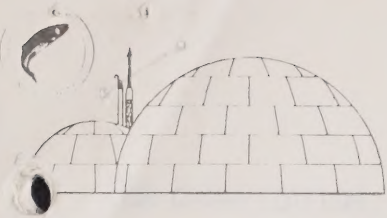
Telephone: (403) 873-3580
Telex: 034-45552

OTTAWA HEARINGS

THURSDAY, JUNE 3, 11400

1. Andrew Roman, Canadian Association in Support of Native People
2. George Manual, President, National Indian Brotherhood,
and Hans Ragnar Mathisen
3. Grant Maxwell, Canadian Catholic Conference
4. Mrs. Dorothy Beach, National Council of Women
5. D.B. Rattray, Pollution Probe
6. Andrew Rickard, Chief, Grand Council Treaty #9
7. Ken Opie
8. Bill Edmonds, Labrador Inuit Association
9. Suzanna van den Heuvel, YWCA Cross-Cultural Study Group
10. Michael Glover, Solar Energy Society, Ottawa Chapter

C 542/543



INUIT TAPIRISAT OF CANADA

Δ Δ Δ ' C A N U ' b a C T

James Amagolik

PRESENTATION TO
THE MACKENZIE VALLEY PIPELINE INQUIRY

222 Somerset St. West
2nd Floor
Ottawa, Ont.
K2P 2G3
Ph: (613)238-8181
Telex: 053-3517

* * * *

INUIT TAPIRISAT OF CANADA

JUNE 3, 1976

MR. COMMISSIONER, LET ME FIRST OF ALL THANK YOU FOR GIVING US THIS OPPORTUNITY

TO APPEAR BEFORE YOU ON BEHALF OF ALL THE INUIT OF THE NORTHWEST TERRITORIES.

WE FOLLOWED WITH INTEREST YOUR HEARINGS IN THE INUIT COMMUNITIES OF THE WESTERN

ARCTIC, AND IT IS ENCOURAGING TO US ALSO TO NOTE THAT YOUR HEARINGS IN SOUTHERN

CANADA ARE ATTRACTING A GREAT DEAL OF INTEREST AND GENERATING CONSIDERABLE

DISCUSSION.

OUR ORGANIZATION, INUIT TAPIRISAT OF CANADA, REPRESENTS ALL OF THE INUIT OF CANADA, NUMBERING SOME 18,500 IN THE NORTHWEST TERRITORIES, NORTHERN QUEBEC AND LABRADOR. THERE ARE SIX REGIONAL INUIT ASSOCIATIONS, WHOSE PRESIDENTS ARE ON THE BOARD OF DIRECTORS OF INUIT TAPIRISAT. ONE OF THE REGIONAL AFFILIATES IS THE COMMITTEE FOR ORIGINAL PEOPLE'S ENTITLEMENT, MORE COMMONLY KNOWN AS COPE ...AND AS YOU KNOW, COPE HAS BEEN ACTIVELY INVOLVED FROM THE BEGINNING WITH YOUR HEARINGS IN THE NORTH, SINCE IT REPRESENTS THE INUIT OF THE WESTERN ARCTIC.

YOUR INQUIRY IS UNIQUE, SIR, AND IT ESTABLISHES AN IMPORTANT PRECEDENT. WE HOPE THIS PRECEDENT WILL BE RECOGNIZED WHEN OTHER MAJOR DEVELOPMENTS ARE PROPOSED. SO FAR AS WE KNOW, THIS IS THE FIRST TIME CANADIANS HAVE BEEN GIVEN AN OPPORTUNITY TO TAKE PART IN MEANINGFUL DISCUSSIONS OF A MAJOR DEVELOPMENT PROJECT BEFORE IT ACTUALLY GETS STARTED. MORE PARTICULARLY, IT IS THE FIRST TIME THE NATIVE PEOPLE HAVE BEEN GIVEN SUCH AN OPPORTUNITY TO PUT THEIR CASE BEFORE SOMEONE THEY FEEL THE CAN TRUST.

YOUR PATIENCE HAS BECOME LEGENDARY, MR. COMMISSIONER, BUT TODAY WE DO NOT INTEND TO SUBJECT YOU TO A LONG EMOTIONAL APPEAL. RATHER, WE WILL SET OUT AS BRIEFLY AND AS FACTUALLY AS POSSIBLE OUR POSITION WITH REGARD TO THE PROPOSED MACKENZIE VALLEY NATURAL GAS PIPELINE.

WE INUIT HAVE NEVER SAID THAT WE ARE OPPOSED TO ALL DEVELOPMENT. SOMETIMES, PERHAPS OFTEN, WE HAVE NOT LIKED THE WAY THAT DEVELOPMENT HAS PROCEEDED. IN PARTICULAR, WE DO NOT LIKE IT WHEN SOMEONE ELSE GETS THE BENEFITS AND WE PAY THE COSTS IN TERMS OF DESTRUCTION OF OUR LAND AND OUR LIFESTYLE.

BUT WE KNOW THAT THE DECISIONS WILL BE MADE BY SOMEONE OTHER THAN OURSELVES AND THEREFORE WE SUSPECT THAT SOME DEVELOPMENT ^{will take place} IS INEVITABLE, WHETHER WE WANT IT OR NOT. WHAT WE ARE ASKING FOR IS SOME SAY IN THE WAY IN WHICH EXPLORATION AND DEVELOPMENT TAKE PLACE, AND A DEGREE OF CONTROL WHICH ALLOWS US TO PROTECT THE ENVIRONMENT AND THE WILDLIFE AND THUS ENSURE THE SURVIVAL OF OUR WAY OF LIFE, OUR CULTURE AND OUR IDENTITY.

WE JOIN WITH COPE AND OTHER NATIVE ASSOCIATIONS IN OPPOSING AN IMMEDIATE START
ON THE NATURAL GAS PIPELINE.

AS INUIT, WE CONSIDER OURSELVES TO BE THE OWNERS OF THE LAND IN THE NORTHERN PART
OF THE MACKENZIE DELTA AND NORTH COASTAL YUKON THAT WOULD BE AFFECTED BY A PIPELINE.

WE HAVE NEVER SIGNED TREATIES GIVING UP OUR LAND.

WE HAVE NEVER BEEN CONQUERED.

AND WE HAVE NEVER SURRENDERED OUR LAND.

INUIT LIVED ON THAT LAND AND USED THAT LAND THOUSANDS OF YEARS BEFORE WHITEMAN
ARRIVED ON THIS CONTINENT. BEFORE THE OIL COMPANIES BECAME INTERESTED, BEFORE
THE PIPELINE COMPANIES BECAME INTERESTED, BEFORE THE GOVERNMENT BECAME INTERESTED,
THE LAND WAS HOME TO THE INUIT.

AND IT IS STILL OUR HOMELAND. THE EVIDENCE FROM OUR INUIT LAND USE AND OCCUPANCY PROJECT, WHICH WAS PRESENTED IN PART AT THE COMMUNITY HEARINGS, SHOWS THAT INUIT CONTINUE TO RELY ON THE LAND AND THE ANIMALS AS MUCH AS THEY EVER DID IN THE PAST.

A LEGAL DOCUMENT WHICH SIMPLY STATES THAT WE OWN THE LAND WHICH HAS ALWAYS BEEN OURS IS NOT THE MAIN POINT, MR. COMMISSIONER. I STAND HERE BEFORE YOU NOT SO MUCH FOR "MY RIGHTS" BUT BECAUSE I CARE. I CARE NOT FOR MYSELF, BUT FOR MY CHILDREN AND THEIR FUTURE. I CARE ABOUT THE NATIVE PEOPLE OF THIS COUNTRY. ^{I get the feeling that people down here in Ottawa don't give a damn.} I CARE ABOUT CANADA. [^] THE PEOPLE OF THIS COUNTRY MUST HAVE A GOOD HARD LOOK AT WHERE THIS COUNTRY IS GOING. THE PIPELINE MUST NOT BE BUILT IF IT WILL BE ONLY FOR THE BENEFIT OF THE LIKES OF THE MAYOR OF CALGARY OR THE TERRITORIAL COUNCILLORS OF YELLOWKNIFE. IF THE PIPELINE IS TO BE BUILT, IT MUST BE FOR THE BENEFIT OF THE LITTLE PEOPLE.

WE CAN NO LONGER PUMP THE ENERGY OUT OF THE GROUND AS FAST AS WE CAN AND USE IT OR SELL IT AS FAST AS WE CAN. THE EARTH IS ONLY SO BIG AND YOU CAN ONLY TAKE SO MUCH OUT OF IT. ^{Once it's gone, it's gone.} [^] WHAT WILL HAPPEN TO OUR CHILDREN WHEN THE LAST DROP OF OIL HAS BEEN PUMPED OUT OF THE GROUND. PEOPLE CANNOT KEEP EXPECTING TO MAINTAIN THEIR HIGH STANDARD OF LIVING. PEOPLE MUST NOW BE PREPARED TO MAKE SACRIFICES.

THE PRIME MINISTER OF THIS COUNTRY HAS SAID THAT THERE NEEDS TO BE A "NEW SOCIETY". A SOCIETY WHICH WILL LOOK TO THE FUTURE AND HAVE CONCERN FOR THEIR CHILDREN. A SOCIETY ^{truly} [^] CONCERNED FOR THEIR CHILDREN. A SOCIETY WHICH WILL MAKE SACRIFICES SO THAT THEIR CHILDREN WILL HAVE A MORE SECURE FUTURE. A SOCIETY WHICH WILL BE PREPARED TO SAY "WE CARE" ^{and mean it.}

THE NORTH HAS BEEN LABELLED AS THE "LAST FRONTIER". SOME LOOK AT IT AS SOMETHING WHICH NEEDS TO BE CONQUERED, EXPLORED AND EXPLOITED. IT HAS BEEN CALLED A WAREHOUSE OF RESOURCES. TO US IT IS HOME. IT IS PART OF US. IT IS WHERE WE

WERE BORN. IT IS WHERE WE WILL DIE. IT BELONGS TO OUR CHILDREN. FOR THE SAKE OF FUTURE GENERATIONS OF ALL CANADIANS, THIS LAND MUST BE PROTECTED, PRESERVED AND USED WISELY. IT IS NOT A WASTELAND OF ICE AND SNOW. IT MUST NOT BECOME A WASTELAND OF CONCRETE TOWERS, RAILWAYS, PIPELINES AND A BROKEN PEOPLE.

LAST FEBRUARY, WE PRESENTED TO THE PRIME MINISTER AND THE FEDERAL CABINET A PROPOSAL FOR SHARING OUR LAND WITH THE REST OF CANADA. I WANT TO EMPHASIZE THAT IT IS A LAND-SHARING PROPOSAL. IN FACT, WE ARE NOT CLAIMING ANYTHING BECAUSE INUIT ALREADY OWN THE LAND. SOME DISCUSSIONS ON OUR PROPOSALS ARE IN PROGRESS, BUT WE HAVE YET TO REACH EVEN AN AGREEMENT-IN-PRINCIPLE.

WE SUBMIT THAT TO START BUILDING PIPELINES, PROCESSING PLANTS AND GATHERING SYSTEMS AT THIS POINT WOULD AMOUNT TO TRESPASSING ON PROPERTY OWNED, USED AND OCCUPIED BY INUIT CITIZENS OF CANADA. BEFORE ANY PIPELINE IS BUILT, THE LAND RIGHTS OF INUIT MUST BE SETTLED.

AS WE SEE IT, A FAIR SETTLEMENT OF OUR RIGHTS WILL PROVIDE A FRAMEWORK WITHIN WHICH INUIT CAN COPE WITH INDUSTRIAL DEVELOPMENT. IT WOULD GIVE US THE MEANS TO ENSURE THAT THE LAND AND THE ENVIRONMENT CONTINUE TO SUSTAIN US AND OUR CHILDREN IN THE FUTURE. MR. COMMISSIONER, I DO NOT NEED TO REMIND YOU OF OUR FEELING FOR THE ENVIRONMENT. HAVING TRAVELLED TO THE COMMUNITIES, YOU KNOW FIRST-HAND OF OUR DEEP CONCERN FOR THE LAND AND THE ANIMALS.

TO ADEQUATELY PROTECT THOSE CONCERNS, WE MUST HAVE SOME CONTROL OVER OUR OWN DESTINY AND THE BEST WAY TO ACHIEVE THAT IS THROUGH A FAIR SETTLEMENT OF OUR LAND RIGHTS. OF COURSE, THIS WILL MEAN THAT INUIT WILL ASSUME SOME REAL POLITICAL AND ECONOMIC POWER IN THEIR OWN LAND.

BUT THAT IS NOT SUCH A FRIGHTENING PROSPECT AS SOME SOUTHERNERS AND NORTHERNERS SEEM TO BELIEVE. WE HAVE ALWAYS MAINTAINED THAT THE NATIVE PEOPLE OF THE NORTH WILL BE A LOT EASIER TO DEAL WITH ONCE THEY ARE NO LONGER TREATED AS THE COLONIAL SUBJECTS OF YELLOWKNIFE AND OTTAWA.

YOUR HEARINGS HAVE MADE CLEAR THAT A GAS PIPELINE MAY BE ONLY THE THIN EDGE OF THE WEDGE OF DEVELOPMENT. WE NOW KNOW THAT IN FACT THERE MAY BE TWO OR THREE GAS PIPELINES, AN OIL PIPELINE, AND HYDRO TRANSMISSION LINES FROM THE NORTH. IS THIS MASSIVE DEVELOPMENT GOING TO LEAVE A BROKEN PEOPLE AND A BROKEN CULTURE IN ITS WAKE? IF NOT, INUIT MUST BE ALLOWED THE OPPORTUNITY TO PARTICIPATE IN THE ^{social, + economic} POLITICAL PROCESS AS FULL CANADIANS, AND NOT TREATED AS ROMANTIC REMNANTS FROM THE PAST TO BE LOOKED AFTER AS WARDS OF THE GOVERNMENT.

WE BELIEVE THAT A FAIR LAND SETTLEMENT CAN ALSO PROVIDE ECONOMIC ALTERNATIVES FOR INUIT, SO THAT BIG-TIME INDUSTRIAL DEVELOPMENT DOES NOT HAVE TO BE THE ONLY GAME IN TOWN. SOME INUIT MAY WANT TO WORK ON THE PIPELINE, BUT WE WOULD BE FOOLHARDY TO LOOK TO THE PIPELINE AS A SOURCE OF LONG-TERM SATISFYING JOBS. AT THE PRESENT TIME, THE ONLY ALTERNATIVE TO SHORT TERM WAGE EMPLOYMENT IS WELFARE AND THE LOSS OF PRIDE AND DIGNITY THAT GO WITH IT.

WE CAN DO BETTER THAN THAT. A LAND SETTLEMENT WOULD CREATE NEW OPPORTUNITIES

FOR THE INUIT IN THE AREAS OF RENEWABLE RESOURCE HARVESTING, FOR EXAMPLE,

GIVEN THE CHANCE, INUIT CAN CREATE ECONOMIC OPPORTUNITIES THAT WILL BRING

COMMUNITIES TOGETHER INSTEAD OF TEARING THEM APART.

MR. COMMISSIONER, WE HAVE ONLY TO LOOK AT ALASKA TO SEE THE DISRUPTION THAT

CAN ACCOMPANY A PROJECT SUCH AS THE PIPELINE. IT IS A FRIGHTENING PROSPECT

AND ONE THAT WE ARE DETERMINED TO AVOID. IN PART, WE ARE LOOKING TO YOU TO

ENSURE THAT IF A PIPELINE IS BUILT, IT IS BUILT WITH THE MAXIMUM SAFEGUARDS

FOR THE LAND AND THE NATIVE PEOPLE, BUT JUST AS IMPORTANT, WE ARE LOOKING TO

OURSELVES TO CREATE A FUTURE IN WHICH WE ARE PARTICIPATING IN DECISIONS THAT

AFFECT OUR LIVES. THAT CAN ONLY COME ABOUT THROUGH A FAIR LAND SETTLEMENT.

TO PROCEED WITH THE PIPELINE NOW, BEFORE NATIVE LAND RIGHTS HAVE BEEN

SETTLED, WOULD ALSO SET A DANGEROUS PRECEDENT AND ONE THAT CAUSES THE

INUIT GRAVE CONCERN. IF THE MACKENZIE VALLEY LINE IS PUSHED THROUGH, IT

COULD ESTABLISH A PRECEDENT FOR THE PROPOSED POLAR GAS PIPELINE WHICH

WOULD RUN FROM THE ARCTIC ISLANDS SOUTH THROUGH INUIT LAND AND INVOLVE

MORE TRESPASSING, DISRUPTION OF THE TRADITIONAL WAY OF LIFE, AND SOCIAL

AND ECONOMIC UPHEAVAL.

WE DO NOT BELIEVE THAT WE ARE BEING UNREASONABLE IN ASKING THAT A PIPELINE

BE DELAYED UNTIL AFTER A LAND SETTLEMENT. THERE ARE OTHER EQUALLY STRONG

REASONS THAT ARGUE FOR DELAY. WE HAVE NO DESIRE TO WITHHOLD SUPPLIES OF

NATURAL GAS IF THEY ARE URGENTLY NEEDED IN THE SOUTH, BUT DO WE REALLY

KNOW WHETHER OUR COUNTRY IS FACING A SERIOUS ENERGY SHORTAGE?

IT WAS ONLY ABOUT THREE YEARS AGO WE WERE TOLD THAT CANADA HAD SUFFICIENT ENERGY SUPPLIES TO MEET ITS OWN NEEDS IN THE FORESEEABLE FUTURE, WITH PLENTY LEFT OVER TO EXPORT TO THE UNITED STATES. NOW, SUDDENLY, WE ARE TOLD WE FACE A SHORTAGE AND THAT THE PRICE OF CRUDE OIL AND NATURAL GAS MUST BE INCREASED. WE ARE TOLD THAT THE OIL COMPANIES MUST HAVE MORE REVENUE SO THEY CAN STEP UP THEIR EXPLORATION AND FIND MORE RESERVES. THAT MEANS MORE PRESSURE ON THE ENVIRONMENT, THE WILDLIFE AND THE PEOPLE OF THE NORTH. THE AVERAGE SOUTHERN CANADIAN MUST FIND THIS ALL VERY CONFUSING. TO AN INUK TRAPPER LIVING IN SACHS HARBOUR OR PAULATUK IT IS POSITIVELY BEWILDERING.

THEN THERE IS THE QUESTION OF CONSERVING ENERGY. WE HEAR A LOT ABOUT IT.

THE GOVERNMENT TELLS US WE MUST STOP WASTING FUEL. WE AGREE WITH THIS. BUT

WE ARE CERTAINLY NOT CONVINCED THAT SOUTHERN CANADA IS SERIOUS ABOUT

CONSERVATION. ALL THE EVIDENCE POINTS IN PRECISELY THE OPPOSITE DIRECTION.

YOU JUST HAVE TO LOOK OUT ON THE STREET AT ALL THOSE BIG CARS...AND THE

GOVERNMENT BUILDINGS WITH LIGHTS BURNING ALL NIGHT IN EMPTY OFFICES. HOW

MANY CABINET MINISTERS HAVE SET AN EXAMPLE FOR THE REST OF US BY TRADING

IN THEIR LIMOUSINES ON SUB-COMPACTS.

WE ARE CONCERNED AND PUZZLED ALSO ABOUT THE ECONOMIC IMPACT OF THIS PROJECT ON THE WHOLE COUNTRY. OF COURSE, WE DO NOT UNDERSTAND ALL THE ECONOMIC IMPLICATIONS. HARDLY ANYONE DOES. BUT WE HAVE BEEN TOLD THAT THE PIPELINE WILL COST AN ESTIMATED 10 BILLION DOLLARS. WE ARE WARNED REPEATEDLY ABOUT THE DANGERS OF INFLATION, AND WE ARE URGED TO TIGHTEN OUR BELTS, ACCEPT SMALLER SALARY INCREASES, AND GENERALLY TO DEMAND LESS OF THE CANADIAN ECONOMY.

CAN SUCH A HUGE INVESTMENT AS THIS BE MADE WITHOUT CREATING EVEN WORSE INFLATION? ARE CANADIANS WILLING TO PAY THAT PRICE? THESE ARE SOME OF THE QUESTIONS THAT WE FEEL HAVE NOT BEEN ANSWERED TO THE SATISFACTION OF THE AVERAGE CANADIAN.

A PIPELINE BUILT RIGHT NOW WOULD TAKE AWAY MORE THAN IT WOULD GIVE TO THE

ORIGINAL INHABITANTS OF THE NORTH. THE NATIVE PEOPLE WILL BE OFFERED ONLY

THE MOST MENIAL JOBS ON THE CONSTRUCTION...AND EVEN THOSE JOBS WILL BE JUST

TEMPORARY. WHEN THE PROJECT IS FINISHED, THE JOBS WILL DISAPPEAR AND PERHAPS

THE WILDLIFE WILL HAVE DISAPPEARED AS WELL. AND WHERE DOES THAT LEAVE THE

NATIVE PEOPLE? WITH NOTHING TO FALL BACK ON BUT THE WHITEMAN'S WELFARE

ASSISTANCE.

PERHAPS IT ALL BOILS DOWN TO WHETHER THE GOVERNMENT OF CANADA, THE POLITICIANS

AND THE SOUTHERN BUREAUCRATS HAVE LEARNED ANY LESSONS FROM HISTORY. WE HAVE

SAID BEFORE THAT WHERE THE INUIT ARE CONCERNED, IT IS NOT TOO LATE TO AVOID

THE MISTAKES OF THE PAST.

WE HAVE PUT THREE YEARS OF HARD WORK INTO PREPARING THE INUIT LAND SETTLEMENT PROPOSAL THAT WAS PRESENTED TO THE GOVERNMENT LAST FEBRUARY. I WANT TO SAY AGAIN THAT WE ARE OFFERING TO SHARE OUR LAND WITH CANADIANS, BUT WE ARE NOT GIVING IT AWAY. THE SETTLEMENT OF NATIVE LAND RIGHTS REMAINS THE FIRST ITEM OF UNFINISHED BUSINESS IN THE NORTH.

OUR FEAR IS THAT PROJECTS LIKE THE MACKENZIE VALLEY PIPELINE, PROPOSED UNDER PRESSURE AND UNDERTAKEN BEFORE A LAND SETTLEMENT, WILL CONDEMN THE PROUD AND INDEPENDENT NATIVE CITIZENS OF THE ARCTIC TO THE KIND OF DEMORALIZING AND DEGRADING WELFARE CULTURE WHICH HAS BEEN IMPOSED ON SO MANY NATIVE PEOPLE IN THE SOUTH.

16.

THE ESTABLISHMENT OF YOUR COMMISSION OF INQUIRY, SIR, WAS A STEP IN THE RIGHT DIRECTION AND THE GOVERNMENT OF CANADA IS TO BE COMMENDED FOR TAKING THAT STEP AND FOR GIVING YOU TERMS OF REFERENCE BROAD ENOUGH TO PERMIT THE CREATION OF A UNIQUE FORUM FOR HEARING THE NATIVE PEOPLE AND THEIR CONCERNS. OUR MAIN HOPE NOW --- PERHAPS OUR ONLY HOPE -- IS THAT THE GOVERNMENT PAYS ATTENTION TO WHAT YOU SAY IN YOUR REPORT.

IN CONCLUSION, LET ME SAY THAT WE WILL BE APPEARING BEFORE YOU AGAIN, JOINTLY WITH REPRESENTATIVES OF COPE, WHEN YOU RETURN TO YELLOWKNIFE TO RESUME THE SOCIAL AND ECONOMIC PHASE OF YOUR HEARINGS. AT THAT TIME, WE WILL BE PRESENTING MORE DETAILED EVIDENCE ON OUR COMPREHENSIVE LAND SETTLEMENT PROPOSAL.

THANK YOU.

A CALL FOR A MORATORIUM

SOME MORAL AND ETHICAL CONSIDERATIONS RELATING

TO

THE MACKENZIE VALLEY PIPELINE

A Statement of Evidence by

PROJECT NORTH

before the

MACKENZIE VALLEY PIPELINE INQUIRY

in

OTTAWA, CANADA

June, 1976

The Interchurch Project on Northern Development -- PROJECT NORTH

- A project of - the Anglican Church of Canada
- the Canadian Catholic Conference of Bishops
- the United Church of Canada

Mr. Commissioner, the Anglican, United and Roman Catholic Churches represented here today in Project North, would like to thank you for this opportunity of appearing before you to express some of the moral and ethical issues which we feel to be crucial to any discussion of the proposed Mackenzie Valley Natural Gas Pipeline and, indeed, to any discussion of Northern development and Native concerns.

These concerns have reminded some of us of a legend of the Inuit which bears repeating.

It is called the Legend of the Raven.

At one time, the Raven was able to talk with Man. The Raven was a great help to Man. The Raven was a great help to Man because he would fly out and search for the caribou, the seal or the walrus and would report back to Man. Man would hunt and they would share the food. They were brothers. But then, one day, greed entered the picture and the Raven wanted the food for himself. Because of this, he lost his voice and was left with nothing but a raspy croak. Today, although the Raven is seen everywhere in the North where Man lives, he no longer talks to Man and they are not brothers.

We believe this legend has a profound meaning for us today. For if we do not learn to share and live together as brothers, our survival is in serious jeopardy.

It is for this reason that we intend today to press for consideration by this inquiry -- and through it by the people of Canada -- for a moratorium on all major Northern resource development projects, including the Mackenzie Valley Pipeline, to give Canadians an opportunity to work together to develop alternative

lifestyles, based on conserver rather than consumer attitudes.

These concerns come out of various statements that have been made by the Churches we represent here today.

In September of last year the Roman Catholic Bishops of the Canadian Catholic Conference issued their 18th annual Labour Day Statement. It was entitled "*Northern Development : At What Cost?*"

The statement, which was widely acclaimed by Native organizations and others interested in a more rational form of Northern development, expressed the wish that the Catholic community, together with fellow Christians, members of other faiths and fellow citizens would be able to act "in solidarity with the Native Peoples of the North in a common search for more creative ways of developing 'the last frontier' of this country."

The statement also indicated that several conditions be met before any final decisions are made to proceed with specific projects of Northern development such as the Mackenzie Valley Pipeline:

- a) sufficient public discussion and debate about proposed industrial projects, based on independent studies of energy needs and social costs of the proposed developments;
- b) achievement of a just land settlement with the Native Peoples, including hunting, fishing, and trapping rights and fair royalties in return for the extraction of valuable resources from their land claims;
- c) effective participation by the Native Peoples in shaping the kind of regional development, beginning with effective control over their own future economic development;
- d) adequate measures to protect the terrain, vegetation, wildlife and waters of northern areas, based on complete and independent

- studies of the regional environment to be affected by proposed developments;
- e) adequate controls to regulate the extraction of energy resources from the North, to prevent the rapid depletion of oil, gas, and other resources which are non-renewable.

The Anglican Church of Canada, through its General Synod meeting at Quebec City just one year ago, made equally strong demands of the Federal government in terms of Native land claims and Northern development.

The Synod passed five related resolutions, but the one most clearly related to the business of this inquiry reads as follows:

That this General Synod, through the Primate, request the Federal government, and through the appropriate Diocesan Bishops, request provincial and Territorial governments to halt planned development until aboriginal claims are settled and to initiate negotiations on the land claims issues without prior conditions and taking seriously these aboriginal claims.

The Synod has communicated these concerns to the Minister of Indian Affairs and Northern Development and the appropriate provincial and territorial governments. During the debate on these resolutions, it was made clear in the minds of the overwhelming majority of delegates (who represent clergy, laity and Bishops from across the Nation) that the Mackenzie Valley Natural Gas Pipeline as presently proposed by the two applicants was the major project they had in mind.

The United Church of Canada has also taken a strong stand on the rights of Native People and the need for a more rational approach to development in the Mackenzie Valley.

Through the Department of Church in Society of the Division of Mission in Canada, which represents the United Church on "social, political, and moral issues", they approved the following resolution on September 27, 1975:

Whereas it is apparent to us all that our white forefathers did not deal fairly with the native peoples of Canada; and in fact appropriated to themselves with no or very little compensation to the natives, large segments of land in Canada: Be it resolved that this department record now its general support of the Indians of Canada in making their claims for land, and inform all native organizations of this support.

These three Churches, whose membership numbers some 15 million Canadians, are also joined with others in expressing their concerns for the North.

Out of these concerns expressed in their official statements, these Churches initiated Project North, an inter-church action project on Northern development.

This coalition of Anglican, United and Roman Catholic Churches, very recently expanded to include the Presbyterian Church in Canada and the Evangelical Lutheran Church of Canada, came into being September 1, 1975, and is staffed by Hugh McCullum and Karmel McCullum, co-authors of This Land Is Not For Sale.

The basic purpose of the two-year project is to increase the capacity of the Churches to address more effectively the ethical and moral issues of Northern development within three broad dimensions:

- Justice for the land claims of the Native People
- Stewardship of resources (energy, mineral, etc.)
- Cultural and spiritual realities.

Within this broad purpose the project, which relates to these Churches through national staff persons assigned to it, has two main objectives:

1. To challenge and mobilize the Church constituency in the South to act and respond to the ethical and moral issues of Northern development, and
2. To support the creative activities of Northern people engaged in the struggles of Northern development.

The project attempts to fulfill these objectives in very concrete ways in four main areas of the country: Northern Quebec, Northern Manitoba, Northwestern British Columbia and the Northwest Territories, and by developing research, documenting issues, maintaining liaison with Native groups and mobilizing Southern constituencies through education, communication and consciousness-raising programmes.

Since the background of the staff is in the area of communication and research, Project North also offers media support to those Native organizations in the North which request it.

The project is funded equally by the three Churches originally involved, with recent additional funding from Presbyterian and Lutheran Churches. Native organizations, notably the Nishga Tribal Council, the Indian Brotherhood of the N.W.T., the Metis Association of the N.W.T., the Northern Flood Committee in Manitoba and the Northern Quebec Inuit Association have close working relationships with the project and give financial support to particular pieces of work. The three national Native organizations, the National Indian Brotherhood, the Native Council of Canada and the Inuit Tapirisat of Canada, also have a working relationship with the project.

Mr. Commissioner, the purpose of this background information is to establish the basic purpose for the presentation of this

brief to your inquiry. That purpose, which we mentioned at the outset of this presentation, is to call for a moratorium -- a minimum of 10 years has been suggested -- on all major resource development in the North, including the Mackenzie Valley Pipeline. On March 2, 1976, the leaders of Canada's five major denominations and the Canadian Council of Churches appeared before the Prime Minister and members of the Federal cabinet to urge upon them the necessity for such a moratorium in a document entitled Justice Demands Action. (See Appendix B)

We believe that the issues of the development of the Mackenzie Valley and, specifically, the proposed natural gas pipeline must be defined in a moral and ethical manner and not merely in terms of economics or political expediency.

There are those in society who would say that the Church should not be involved in political, economic or social issues. These people would argue that the Church is concerned with man's soul and lacks the expertise to deal adequately with other matters.

We reject this concept and turn to the Biblical imperatives of justice and liberation for the poor, the dispossessed and the minorities of this world.* We suggest that the decisions of the Mackenzie Valley Pipeline must be considered along moral and ethical grounds at least as equally as political and economic grounds, because we are talking of the very soul of this Nation.

So, Mr. Commissioner, we would like to ask your indulgence to reflect with us for a few moments on the role of the Church in addressing the moral and ethical issues of Northern development.

* Habakkuk 2:9-10

Amos 5:7-11

In defining development, material values have been allowed to become the norm, while Gospel values are only nominally held as rather abstract propositions which do not affect public attitudes, behaviour and policies all that much. As with many of our social, educational and economic institutions, there has been a tendency for the Church to be caught up in accommodating to the established social order, an order which gives more priority to economic growth and profit-oriented values (which are called "realities") and less to social justice and human dignity (which are called "humanitarian sentiments"). In our experience we are discovering that justice and human dignity are not the automatic by-products of such economic growth.

The Gospel proclaims that God's sovereignty includes all realms of life. Nothing that is human can be outside the Church's mission. It is the love of God in Christ for man that is the basis of the Church's social and political concern. In particular, this means that we stand in solidarity with the Native Peoples of Canada who face the inseparable connection between themselves as a people, and the stewardship of the earth's resources.

Most of us live in and benefit from a socio-economic situation which is sinful. By social sin, we mean that we create and sustain social and economic patterns of behaviour that bind and oppress, give privilege to the powerful and maintain systems of dependency, paternalism, racism and colonialism.

The Gospel is more than mere propositions. The Good News is a cluster of living images and values for living. It brings with it a radically new vision of man. In view of this new vision of man, Christians are called to take a critical stance regarding the social reality of each time and space. The Gospel sheds critical light on the structures and procedures of our institutions,

governments and corporations and calls into question many of the images and norms which prevail in the mainstream of our economic, political and social life.

Let it be clear that we are not speaking of countries far away, but we are speaking of our own Canadian society and many of its institutionalized ways of life. This state of affairs, we believe, demands not only individual repentance on the part of Christians but, even more difficult, a change of social priorities among all Canadians.

We believe the following underlying assumptions guide Canadian public policy making:

1. that our society, as it presently operates, is basically sound and, that at most, a few adjustments are required to cope with changing conditions;
2. that problems can be isolated and analyzed and that the results can be re-integrated with other factors on the basis of rational functional calculations.

Emphasis is given to continuity with present practices and rational, technical decision-making by the "experts" even though it will probably nod in the direction of citizen participation. These are assumptions that must be challenged given the existence of the serious problems of economic and cultural inequalities.

It is our belief that simple tinkering and patchwork will not suffice to bring justice to its fullest extent in our society.

We are talking about more than simple reformism and calling for more than mere individual conversion. We are calling for a conversion within our social and economic structures whereby policy making and decision making will begin to reflect and make

practical the values of justice, dignity and fulfillment for every human being. Our corporate sins must be acknowledged and we must turn around, if we are to have a society that truly reflects the social consequences of the New Commandment. To bless the established order is to remain unconverted!

We want to share with you what was, for those of us who were in attendance at the Anglican Church's General Synod in Quebec City last June, a "moment of truth." It was the day the issue of Native Rights and Northern Development was to be debated. It was introduced by the Bishop of The Arctic, John Sperry. Using the analogy of the parable of the Good Samaritan, he asked the Synod what it should do about the robbed, beaten, and broken body lying beside the road, that was Canada's Native People of today, as the white population and its governments passed by on the other side.

Sperry spoke in passionate and urgent tones:

"We must be like the Good Samaritan, who not only bound up the wounds inflicted by a cruel and heartless society that left a race of people to die, but who stood clearly beside this man and continued to support him when all others had abandoned him, and helped him morally and with action."

"If we today fail to place ourselves clearly on the side of Native People in Canada, and instead pass by on the other side by refusing to state clearly with words and actions where we stand, then we must return to our homes from this place and hang our heads in shame."

Mr. Commissioner, we think that to pass by on the other side means to fail to deal squarely with the issues of justice in respect to Native land claims and the cultural survival of the Native Peoples in the North-West Territories; that it means

irresponsible stewardship with respect to the exploitation of energy and mineral resources in the N.W.T.; that it means to denigrate our human and natural resources; above all, that it is to deny the Gospel of justice, dignity and human fulfillment for all God's people.

From these reflections we believe it is clear to us that we must press home the point that the Federal government has a major responsibility to insist that colonial patterns of development not prevail any longer in the Canadian North, especially in the North-West Territories where the Federal government retains complete jurisdiction.

We are helped in understanding this by examining the forces that are at work in the North, the same forces that are at work in almost every "Third World" situation we know of. The world we talk about is one that is economically underdeveloped, which often has huge reserves of natural resources and has become the target for transnational companies anxious to "open up" or "develop" the North.

There have been studies undertaken which draw striking parallels between the struggle of the Native Peoples in the Amazon region of Brazil where a variety of mining, agricultural, forest and energy projects have been initiated along with the construction of highways, railroads and seaports to service these projects. Native People there have had no role in the decisions about this development, therefore we suggest a colonial pattern of resource development has emerged in that area which has had striking consequences for the Native Peoples who have inhabited the Amazon basin for centuries.

The same forces and the same patterns, we believe, are at

work in the Mackenzie where Native People do not have a decision-making role in Northern development. (See Appendix C)

The most important similarity is the failure to involve Native Peoples in decisions about development that affects them. Land is the essential ingredient to the lives of the indigenous peoples of the Amazon. The Native People of the North-West Territories insist that the land is their life.

Another similarity noted by the studies is the conflict of interest in the DIAND (Department of Indian Affairs and Northern Development) that makes it similar to the Brazilian FUNAI (National Foundation for Assistance to the Indians) a government agency with a two-fold objective:

- i) to protect Native People until they are sufficiently "integrated" into national society;
- ii) to serve as an agency for the Ministry of the Interior promoting the development of the Amazon.

As you know, sir, the two hats worn by the Minister of the DIAND are:

- i) as legal guardian of Native Rights in Canada, and
- ii) to ensure the development of Canada's North, in particular the Yukon and the North-West Territories.

In many instances the same transnational corporations, e.g. Placer/Noranda; Shell Exploration/Royal Dutch Shell; Cominco/Canadian Pacific; Brascan Resources/Brascan Ltd.; Giant Yellowknife/Falconbridge Nickel Mines; INCO; are involved in the two areas and the same policies of the Brazilian government in providing incentives for resource development are found in the incentives of the Northern resource development programmes of the DIAND.

Project North believes it is clear that the colonial patterns of resource development similar to those found in Brazil will occur in the North-West Territories during the next decade if the plans, developed thus far in secret, of the Federal government and the transnational energy corporations are allowed to proceed unchecked.

For these reasons, the Churches insist that there be a moratorium on all Northern development including construction of any Mackenzie Valley Pipeline.

The experience of the Amazon must in no way be allowed to occur in the North-West Territories for while the consequences of colonial development in the Mackenzie are already tragic, their continuation would result in nothing less than disaster.

There are those within the present administration in Canada who will argue strenuously that our democratic system protects adequately the rights of Native minorities. In fact the Natives are not a minority in the North-West Territories, as you well know, and it is clear, we believe, that their rights are not adequately safeguarded.

We cannot afford to be complacent about the protection of the democratic rights of the Native People of the North. The record is not good. The "colonial" administration of the territorial council, the lone, but hardy voice of the N.W.T.'s sole Member of Parliament and the demands of a consumer-oriented Southern, white majority makes the guaranteeing of these rights a constant, and often losing struggle.

For there to be equality in this struggle it is necessary for the Churches and all other groups interested in the moral and ethical questions of Northern development to stand officially,

openly and clearly on the side of justice for and the human rights of the Native People of this country.

There must be continual demand for freedom of information, a process of accountability in decision-making by senior civil servants as well as elected representatives, and a clear statement of who decides how resource development takes place and for whose benefit.

As Canadians we have an obligation to defend the rights of minorities and to recognize that the various regions -- in this case North and South -- must play an interlocking role if all Canadians are to live in justice and equality.

But we suggest here, Mr. Commissioner, that the rights of Canada's Native People occupy a special status within this country and that we are talking about more than the rights of a minority: we are talking about the rights of Canada's original people.

It is also important to consider that Native People are on the cutting edge of turning the direction of our society's growth from materialism and consumerism to a more fundamentally human concept. In some ways the North is fighting the South's battles.

It is on that note, Mr. Commissioner, that we would like to turn to our basic recommendations which we hope your inquiry will consider carefully, for we believe steadfastly that time is the essential ingredient that must be considered in any application for the construction of a pipeline.

We hope to describe clearly in the remainder of this brief why we are calling for a substantial moratorium on major resource

development in the N.W.T. and the feasibility of such a moratorium not only at the moral and ethical level but at what the government and oil companies like to describe as the "practical" or "realistic" or "pragmatic" level.

We believe that a moratorium on all major resource development in the N.W.T. should be declared and that no right of conveyance should be granted to any pipeline company during this period, until the rights of the Native People have been clearly defined and adjudicated.

That period would be used to achieve the following objectives through a public search for alternative policies of Northern development:

i) Just settlement of all Native land claims: The only major settlement of land claims that has been negotiated by the Federal government in recent years was that in James Bay. It was a land extinguishment settlement at complete variance with the kinds of settlement being envisaged by the Dene and Inuit. It was a settlement which the Minister of the DIAND has publicly indicated will be a model or "will at least contain the ingredients for other settlements." Because of the continued construction of the James Bay hydro development project during the period of negotiations and because the Native People were forced into an unrealistic deadline, from their point of view, the negotiating process was extremely difficult. The moratorium we propose would give all groups the necessary breathing space to negotiate and realize just land claims that reflect the wishes and the aspirations of the Dene and Inuit. Unrealistic deadlines could be avoided and discussions could take place in an open and suitable manner in the North, rather than being rushed through a purely white man's process in Ottawa or Yellowknife. The pressure to produce a proposal and an agreement under the threat

of deadlines is foreign to Native ways of achieving settlements. The use of regional and community discussions and eventual consensus should have at least the same weight as the white man's processes.

ii) Native Peoples programmes for regional economic development: The slogan of the Native People, "Land Not Money", reflects the desire for self-determination and control of their own destiny. This can only be achieved, they insist, through economic development that they control and administer. We would favour policies that support Native People in regions where they do not want large cash settlements such as were negotiated in James Bay and Alaska, but rather the economic base that can be derived from the controlled development of their own natural resources. If a moratorium on major Northern development projects such as the Mackenzie Valley Pipeline were granted, time would be available for the Native People to devise appropriate programmes themselves, rather than the ad hoc method presently in vogue. These programmes would take into consideration the traditional hunting, fishing and trapping of Native People as well as providing a base for local and regional government. These programmes have little chance of development if the Native People are attempting to adjust to, and live within, the enormous social and economic unrest of the construction period for a pipeline. Development of their own regional economic programmes would safeguard their way of life before resource development rather than afterwards when it is too late.

iii) Adequate safeguards to deal with environmental problems like oil spills, blowouts, damage to the terrain and the living creatures: Evidence before this inquiry has made it clear that many of the environmental questions have not been adequately answered by the applicants and that because such a pipeline is the "first" in the world there is no body of experience to draw upon. The question of alternative routes that would cause less

social and environmental damage in the area needs a great deal more examination.

The very real fears of the people whose lives depend so deeply on their relationship to the Beaufort Sea would be allayed if time were given to developing a safer technology for offshore drilling than is presently available to the industry. The hasty planning that has accompanied so many massive industrial and energy projects in the North exemplifies the frontier boom-or-bust mentality of colonial development. Extraction of resources rarely takes into account ecological or environmental concerns until it is too late. A moratorium, we believe, should be used to change this pattern so that adequate safeguards are planned and included in proposals before the construction phase begins.

iv) Adequate programmes to regulate domestic consumption and export of energy resources: Canadians have no real input into a rational nation-wide energy policy. The National Energy Board is not available as a forum to most Canadians. Public discussion is almost impossible because of conflicting, conditional, partial and misleading answers to energy supply-and-demand from the government and industry. A case in point is the failure to explain adequately the unbelievable discrepancy between 1971 and 1974 statements with respect to oil and gas reserves in this country. The Honourable Joe Greene, Minister of Energy, Mines and Resources in 1971, told the nation we had 923 years supply of oil and 392 years supply of gas and had better export these non-renewable resources before they became obsolete. In 1974, the National Energy Board reported that we would have to start importing oil by 1982 and of course the applicants before this inquiry and the same Department of Energy, Mines and Resources insist that a natural gas shortage is just around the corner.

Nothing short of a full and independent public inquiry will ever serve to give the people of the country the facts they need to make the decisions about what is and what is not in their interests. And until such a public inquiry produces some straight answers on energy supply and demand so that the public can participate meaningfully in decision-making, a moratorium on pipeline construction and offshore drilling should be in force.

Too early and precipitate approval of the Mackenzie Valley Pipeline by the National Energy Board and the Federal government will serve further to confuse the issues and leave the people of Canada unable to decide whether they wish to be consumers or conservers.

The following arguments show that if the Federal government takes the appropriate steps there are sufficient supplies of natural gas to ensure Canadian consumption until at least the year 2001. This would give ample time for a full public inquiry and discussion of future energy development with a moratorium on such projects as the Mackenzie Valley Pipeline until the inquiry has been completed and a responsible national energy policy established. At the same time environmental and Native concerns could be dealt with in a just manner.

1. A July, 1975, background study issued by the Science Council of Canada, Energy Conservation by F.H. Knelman, concludes that a serious programme of waste reduction can result in a saving of 30 percent of projected 1995 consumption of natural gas. This cutback, Knelman asserts, could add four years to supply projections.

2. Canadian Arctic Gas Pipelines admits that there is no imminent physical shortage of natural gas in Canada and says

2 there is a 12-year supply available for delivery to all parts of Canada if the Federal government takes the necessary steps to ensure that deliverability. The main problem is not availability but deliverability and the main reason for this is that TransCanada Pipelines cannot meet Eastern Canadian demands because the Crown-owned corporation is unwilling to pay the price suppliers are asking for available Alberta natural gas.

3. Canada now exports to the United States natural gas at the rate of one trillion cubic feet a year, about 40 percent of its annual natural gas production. Long-term contracts call for the export of an additional 14 trillion cubic feet between 1974 and 1995. But, Mr. Commissioner, you are no doubt aware that reduction or elimination of exports is allowable under Canadian law if supply conditions warrant. If 10 trillion cubic feet of natural gas were diverted for domestic use, Canada's gas supply would be extended by seven years.

4. The Alberta government has offered to release, for Eastern Canadian consumption, the 30-year natural gas supply it maintains prior to exporting gas to other provinces. In return, the Federal government must make the commitment to deliver to Alberta, at a future date, an equivalent supply of gas. Acceptance of this offer would add approximately three years to future supplies.

These four steps, Mr. Commissioner, would bring the non-Northern gas supply figures to 26 years, composed as follows: present reserves, 12 years; conservation, 4 years; export cutbacks, 7 years; Alberta swap, 3 years.

Surely the Churches and the Native organizations are justified in asking, "What's the rush to build the Mackenzie

Valley Pipeline when there are so many unanswered questions?"

These are some of the "realities" behind our call for a moratorium and for the purpose of illustrating the fact that Southern whites need not "freeze to death in the dark" while considering the moral and ethical issues of Northern development.

CONCLUSION

The conclusion that we have come to in Project North is defined in terms of the following objectives:

- a reduction in the per capita use of all forms of energy consumed in Canada;
- a concerted national effort to develop alternative sources of energy;
- honouring the aboriginal rights of Natives with respect to the involvement of their lands and culture in projects designed to provide energy for Southern Canadian and United States consumption;
- full satisfaction that the ecology will not be adversely affected prior to the commencement of any massive development project;
- the establishment of just royalty and tax provisions to reduce the unreasonable profits of multinational companies and governments;
- the expenditure of natural resource revenues for enhancing the total well-being of people instead of being solely related to economic growth;
- the gradual reduction of oil and gas exports to the United States and, instead, the export of energy, at below international prices, to underdeveloped countries.

Mr. Commissioner, we have the time and we must use it!

For the sake of ourselves, our children and all future generations of Canadians, we must learn from our Native brothers and sisters that our land and its resources are to be used for the benefit of all people and not exploited for the profits of a few.

Taking the time we have suggested requires a moratorium on the Mackenzie Valley Pipeline, a project so enormous that it will reinforce, perhaps irrevocably, the high energy consuming, materialistic, hedonistic lifestyle that is so seriously under question by so many people in so many ways.

The serious questions that are now being raised by the panic resource dash to our Northern frontier may be a blessing in disguise! For we in Southern Canada are being forced to address the realities of our current way of life. Are we prepared to develop new sets of values, create new social and economic structures that lead us into a less materialistically-oriented society, find new forms of living and growing as people, search for alternative patterns of resource development in such a way that caring, sparing and sharing become a truly human reality? We, in Southern Canada, must soon wake up to these extremely serious questions of our common survival. How we address the issues of Northern development and how we respond to the cries for justice by the Native People of this country will serve to indicate the ways in which we will begin to find answers for these questions.

Since we represent positions taken by the Churches, we feel we must conclude by referring our discussions back to ourselves. What is it that we can really do?

Since there are moral and ethical issues that must be raised then we have no choice but to speak up in language that cannot be misunderstood.

We have spoken today about whether or not the project you are inquiring into makes sense from an economic point of view. We have declared ourselves on the environmental issues. We have raised the question of the development of the Native People of the North. We have indicated the serious need of all Canadians to address the basic question of personal and corporate life-style. Others have spoken to you over the last year-and-a-half, and more recently, on the same subjects.

"In the final analysis", as the 1975 Roman Catholic Labour Day message reminded us, "what is required is nothing less than fundamental social change. Until we as a society begin to change our own life styles based on wealth and comfort, until we begin to change the profit-oriented priorities of our industrial system, we will continue placing exorbitant demands on the limited supplies of energy in the North and end up exploiting the people of the North in order to get those resources."

Therefore, we urge upon you the deepest consideration of our position that a moratorium on Northern resource development be implemented to permit the work of restoration in our society to begin, and to stop further development, exploration, drilling or the issuance of permits of any kind, until all Northern Native land claims have been justly settled.

Finally, Mr. Commissioner, as an offer of real and practical help, we pledge here today to renew our commitment to stand openly and officially and wholeheartedly with the Dene and Inuit of the Mackenzie in their struggle for justice.

Thank you, Mr. Commissioner.

APPENDIX A

Following are the names and affiliation of the Project North Staff Team:

Dr. Tony Clarke, Canadian Catholic Conference, Project Co-ordinator,
Ottawa

Rev. Dr. Russell Hatton, Anglican Church of Canada, Toronto

Rev. Dr. Edward Johnston, Presbyterian Church in Canada, Toronto

Ms. Elizabeth Loweth, United Church of Canada, Toronto

Rev. Dr. Clarke MacDonald, United Church of Canada, Toronto

Mr. Hugh McCullum, Staff Co-ordinator, Toronto

Ms. Karmel McCullum, Staff Co-ordinator, Toronto

Mr. Don Shepherd, Anglican Church of Canada, Regina

Rev. Ernest Willie, Anglican Church of Canada, Toronto

APPENDIX B

The Resolutions of the General Synod of the Anglican Church of Canada, June 1975, Quebec City.

The Resolution of the Department of Church in Society of the Division of Mission in Canada of the United Church of Canada, September 1975.

The Labour Day Statement of the Bishops of the Roman Catholic Church, September 1975.

Resolution of the Canadian Council of Churches, April 1975

Justice Demands Action, A Statement Presented to the Prime Minister and Members of the Federal Cabinet by Canadian Church Leaders, March 1976.

APPENDIX C

Attached are two submissions from Project North to Phase IV of the Mackenzie Valley Pipeline Inquiry on behalf of the Indian Brotherhood of the Northwest Territories and the Metis Association of the Northwest Territories which were presented in April of this year at Yellowknife.



THE RIGHT REVEREND JAMES A. WATTON, B.A., D.D.
BISHOP OF MOOSONEE
BISHOPSTOPE

SCHUMACHER, ONT. P0N 1G0

June 1976

Mr Commissioner:

I have asked that I might be given the privilege of speaking to you immediately following the brief presented by Project North. I have done so that I might endorse the contents of that brief.

To do so adequately I should have three heads. . . one for each of the three hats (or mitres if you wish), that I am called upon to wear. One, is representing, the House of Bishops of the Anglican Church of Canada; the second is that of Metropolitan of the Ecclesiastical Province of Ontario, representing its Bishops and its people. The third is that of the Bishop of the Diocese of Moosonee, which encompasses the area of James Bay and the Cree people of Northern Quebec.

It is this last hat that covers my gray hairs of concern for I am daily dealing already with the results of precipitate development in the lives of people. The real tragedy, of which the James Bay area is just one example, is that our world;- western industrialized, sophisticated and consumer-oriented, has come in so heavy-footed, iron-fisted and cold-hearted; so quickly, so powerfully and so callously, that we simply do not Give people a chance to adjust. ✕ We just overwhelm - or overpower them. It is a course of action, that not only can be called genocide, but will invite and reactions for generations yet to be born. There is a deep mystical relationship with land, which we westerners cannot really appreciate anymore, which is still very real, to our Native people.

Even though we may not be able to comprehend it on its deepest level, we can at least respect it as a profoundly spiritual way of looking at material creation, from which we may yet learn something of value.

I plead for us, the time to listen.

James A. Watton

A STATEMENT TO THE BERGER COMMISSION
by Mgr Adolphe Proulx,
Episcopal Commission for Social Affairs
Canadian Catholic Conference of Bishops

June 3rd, 1976.

On behalf of the Social Affairs Commission of the Canadian Catholic Conference of bishops, I wish to express our support for the brief presented by Project North. We have considered Project North as our major resource for follow-up to our Labour Day message, "Northern Development: At What Cost?"

The struggle of the Dene in the Mackenzie Valley is a sign of hope in our times. As a people, the Dene are opposing all forms of colonial development and asserting their right to self determination. In their struggle to establish their aboriginal rights, the Dene are attempting to gain control of their own destiny as a people for the sake of their children and grand-children.

We, in southern Canada, have much to learn from the experience of the Dene. In our highly industrialized society, more and more people are experiencing a loss of control over their own destinies. Our lives seem to be increasingly dominated by large governments and multi-national corporations. As a result, we find ourselves less and less able to make responsible decisions for the sake of future generations

The so-called "energy crisis" poses a dramatic illustration. The federal government's recent energy strategy has set the stage for the petroleum industry to go ahead with the rapid development of Canada's northern energy. Yet, there are some disturbing questions for southern Canadians.

A STATEMENT TO THE SENATE COMMISSION
by Mr. Adolphe Tremblay,
Executive Director for Social Affairs
Canadian Catholic Conference of Bishops

June 15, 1975

On behalf of the Social Affairs Commission of the Canadian
Catholic Conference of Bishops, I wish to express my
support for the brief presented by Project North. We have
considered Project North as our major resource for follow-
up to our Labor Day message, "Northern Development: Is
It Worth It?"

The struggle of the Dene in the Mackenzie Valley is a struggle
of hope in our time. As a people, the Dene are opposing
all forms of colonial development and asserting their right
to self-determination. In their struggle to establish their
aboriginal rights, the Dene are attempting to gain control
of their own destiny as a people for the sake of their
children and grand-children.

We, in southern Canada, have much to learn from the experience
of the Dene. In our highly industrialized society, more and
more people are experiencing a loss of control over their own
destiny. Our lives seem to be increasingly dominated by
large government and multi-national corporations. As a
result, we find ourselves less and less able to make res-
ponsible decisions for the sake of future generations.

The so-called "energy crisis" poses a dramatic illustration.
The federal government's recent energy strategy has set the
stage for the petroleum industry to go ahead with the rapid
development of Canada's northern energy. Yet, there are some
disturbing questions for southern Canadians.

First, who makes the decisions about our future energy needs and how should these decisions be made? Three years ago, the federal government and the energy industry were telling us that Canada's consumption of oil, gas, and electricity would have to multiply four more times by the end of the century to protect our quality of life and our standard of living. But what is this "quality of life"? Why is it always defined in terms of increasing consumption of material goods? And why are the people of Canada not directly involved in making conscious decisions about our future energy needs?

Second, who can tell us the truth about our existing supplies of energy in Canada. The dramatic fluctuations between the 1971 and 1974 estimates of oil and gas reserves have never been adequately explained. The disturbing fact is that the federal government relies primarily on the energy industry for these estimates. But why is there no independent source of information to provide the people of this country with the truth about Canada's oil and gas supplies?

Third, who will benefit from the rapid development of energy resources in the Canadian North. It is now clear that Canada has made export commitments of natural gas to the United States until 1995 and that U.S. oil companies already have control over a substantial portion of gas in the Mackenzie Delta for export to California markets. Does this mean that Canada's northern supplies of natural gas are to be rapidly developed now to feed industrial centers in the United States?

First, who makes the decisions about our future energy needs and how should these decisions be made? Three years ago, the federal government and the energy industry were telling us that Canada's consumption of oil, gas, and electricity would have to multiply four more times by the end of the century to protect our quality of life and our standard of living. But what is this "quality of life"? Why is it always defined in terms of increasing consumption of material goods? And why are the people of Canada not directly involved in making cogent decisions about our future energy needs?

Second, who can tell us the truth about our existing supplies of energy in Canada. The dramatic fluctuations between the 1971 and 1974 estimates of oil and gas reserves have never been adequately explained. The disturbing fact is that the federal government relies primarily on the energy industry for these estimates. But why is there no independent source of information to provide the people of this country with the truth about Canada's oil and gas supplies?

Third, who will benefit from the rapid development of energy resources in the Canadian North. It is now clear that Canada has made export commitments of natural gas to the United States until 1992 and that U.S. oil companies already have control over a substantial portion of gas in the Mackenzie Delta for export to California markets. Does this mean that Canada's northern supplies of natural gas are to be rapidly developed now to feed industrial centers in the United States?

Fourth, who will pay for the rapid development of northern energy resources? The government's new energy strategy indicates that the Canadian public will underwrite much of the initial cost and risk involved in developing this northern energy through sharp increases in consumer prices and further allocations of tax dollars. Does this also mean that public funds required for housing, hospitals, and other social services will be used to pay for the expensive development of northern energy?

These disturbing questions, Mr. Commissioner, must be faced by the people of this country before proceeding with the energy development in the Canadian North. It is, therefore, in the national interest that a moratorium be called on northern development. We need to take the time as a nation to develop alternative energy policies and programmes based on the values of responsible stewardship. I hope and pray, Mr. Commissioner, that we have the courage to take greater control of our own destiny and make responsible decisions now for the sake of our children and our grandchildren.

Fourth, who will pay for the rapid development of northern energy resources? The Government's new energy strategy indicates that the Canadian public will undertake much of the initial cost and risk involved in developing this northern energy through sharp increases in consumer prices and further allocations of tax dollars. Does this also mean that public funds required for housing, hospitals, and other social services will be used to pay for the expensive development of northern energy?

These disturbing questions, Mr. Commissioner, must be faced by the people of this country before proceeding with the energy development in the Canadian North. It is therefore, in the national interest that a programme be called on northern development. We need to take the time as a nation to develop alternative energy policies and programmes based on the values of responsible stewardship. I hope and pray, Mr. Commissioner, that we have the courage to take greater control of our own destiny and make responsible decisions now for the sake of our children and our grandchildren.



SUBMISSION TO THE
SOUTHERN HEARINGS
MACKENZIE VALLEY PIPELINE INQUIRY

made before
Mr. Justice Thomas R. Berger
at
Ottawa, June 3, 1976

Canadian Nature Federation
46 Elgin Street, Ottawa, Ontario K1P 5K6
1-613-238-6154

Presented by: Theodore Mosquin
Executive Director

Respectfully submitted

Mr. Commissioner my name is Theodore Mosquin. I am the Executive Director of the Canadian Nature Federation and I am here representing our Board of Directors who have formally approved this statement at a meeting on May 19.

I want to first say a few words about our Federation. The Canadian Nature Federation was formed in 1971 out of the Canadian Audubon Society. The Federation started with 1,800 members; over the past 4 years our membership has increased to over 20,000. In addition to speaking for our members, we are also representing about 120 provincial naturalists' federations and local societies, one or more in nearly every major town in Canada. In this province, for example, we are speaking for the Federation of Ontario Naturalists, and some 45 other societies with an estimated combined membership in the province of about 25,000.

Our Federation is not a pressure group in the usual sense that such groups represent mainly the interests of a limited number of people; rather we consider ourselves to be in a special category in that we advocate a set of social values centering around nature. These values are held by nearly all people. Our concern is that these natural values be adequately spoken for in places where decisions are made. We see our organization as playing a strong role in portraying wildlife and the natural environments of Canada to people who have not tended to think much of nature as part of the cultural heritage of the country.

In our view the growth of the Canadian Nature Federation in the past few years is due to the fact that there are thousands of people out there who feel that governments are not adequately looking after their interests in protecting the priceless assets of the environment; many of these people have turned to us to speak for them and we try our best with our limited resources.

Mr. Commissioner, before getting into the body of our submission, I want to let you know how grateful our Federation is to you for funding the Northern Assessment Group. As you know the Canadian Nature Federation was one of the five organizations that established NAG in 1974 for it was essential that environmental groups have some research capability independent of industry and government. Adequate funding for environmental intervenors, is something that is sadly lacking in this country. Without your support of our Federation through NAG it would have been impossible for us and other environmental organizations to conduct a meaningful assessment of the pipeline application.

Mr. Commissioner, my name is Theodore Spence. I am the Executive Director of the Canadian Nature Federation and I am here representing our Board of Directors who have formally approved this statement at a meeting on May 10.

I want to first say a few words about our Federation. The Canadian Nature Federation was formed in 1971 out of the Canadian Audubon Society. The Federation started with 1,500 members, over the past 4 years our membership has increased to over 30,000. In addition to spending for our members, we are also representing about 150 provincial naturalists, ornithologists and local societies, one or more in nearly every major town in Canada. In this process, for example, we are speaking for the Federation of Great Lakes Naturalists, and some 15 other societies with an estimated combined membership in the province of about 15,000.

Our Federation is not a pressure group in the usual sense that such groups represent mainly the interests of a limited number of people, rather we consider ourselves to be in a special category in that we advocate a set of social values contrary to social goals. These values are held by nearly all people. Our concern is that social goals which are advocated by the government, which are different and wide. We see our organization as playing a strong role in contrasting values and the natural environment of Canada to people who have not tended to think much of nature as part of the cultural heritage of the country.

In our view the focus of the Canadian Nature Federation is the past few years in this is the fact that there are thousands of people out there who feel that governments are not adequately looking after their interests in protecting the priceless assets of the environment; many of these people have turned to us to speak for them and we try our best with our limited resources.

Mr. Commissioner, before getting into the body of our submission, I want to let you know how grateful our Federation is to you for funding the Canadian Association Group. As you know the Canadian Nature Federation was one of the five organizations that participated in 1974 for its was essential that environmental groups have some research explicitly independent of industry and government. A search looking for environmental responses, is something that is badly lacking in this country. Without your support of our Federation through what it would have been impossible for us and other environmental organizations to conduct a meaningful assessment of the pipeline question.

At the outset, I would like to say that the Canadian Nature Federation is not opposed, in principle, to the building of a pipeline up the Mackenzie Valley.

However, we are concerned that the Government of Canada has not been following the objectives, priorities and strategies for northern development as detailed in the report "Northern Canada in the '70's" which was presented to the Standing Committee on Indian Affairs and Northern Development on March 28, 1972. The report might best be summarized by the following quotations:

"In the course of its policy review, the Government affirmed that the needs of the people in the North are more important than resource development and that the maintenance of ecological balance is essential." and...

"... the essence of choice for the Government is to maintain an appropriate degree of balance among these three elements." The three being people, resources, and the environment.

Unfortunately, the Government has not maintained any balance between these three elements. In fact, only the exploitation of natural resources, especially oil and natural gas, has received priority treatment from Government.

In the Mackenzie Delta and Tuktoyaktuk Peninsula region not one square inch of land and water has been allocated for parks; not one square inch has been allocated for hunting, fishing and trapping areas for the native peoples; and not one square inch has been allocated for ecological reserves or wilderness areas.

Why this has happened is not at all clear, but, what is crystal clear is that if the Government had followed its objectives, priorities and strategies outlined in "Northern Canada in the '70's" most of the concerns, doubts, and fears raised before this Commission would have been resolved in a rational and enlightened manner.

The Canadian Nature Federation believes that the only reason for extracting any Canadian resource, or for developing any Canadian industry is to sustain or improve the quality of Canadian life. Developments are only worthwhile if they contribute to the unity, strength and independence of our country; to the creation of communities that are healthy, varied, secure and stimulating; to the creation of challenging, long-lasting and rewarding jobs and investment opportunities for Canadians; and to safeguard our environment, including the vast natural areas so important to our culture and heritage.

At the outset, I would like to say that the Canadian Nature Federation is not opposed, in principle, to the building of a pipeline up the Mackenzie Valley.

However, we are concerned that the Government of Canada has not been following the objectives, priorities and strategies for northern development as detailed in the report "Northern Canada in the '70's" which was presented to the Standing Committee on Indian Affairs and Northern Development on March 28, 1972. The report might best be summarized by the following quotations:

"In the course of its policy review, the Government affirmed that the needs of the people in the North are more important than resource development and that the maintenance of ecological balance is essential." and...

"... the essence of choice for the Government is to maintain an appropriate degree of balance among these three elements." The three being people, resources, and the environment.

Unfortunately, the Government has not maintained any balance between these three elements. In fact, only the exploitation of natural resources, especially oil and natural gas, has received priority treatment from Government.

In the Mackenzie Delta and Tuktoyaktuk Peninsula region not one square inch of land and water has been allocated for parks; not one square inch has been allocated for hunting, fishing and trapping areas for the native peoples; and not one square inch has been allocated for ecological reserves or wilderness areas.

Why this has happened is not at all clear, but, what is crystal clear is that if the Government had followed its objectives, priorities and strategies outlined in "Northern Canada in the '70's" most of the concerns, doubts, and fears raised before this Commission would have been resolved in a rational and enlightened manner.

The Canadian Nature Federation believes that the only reason for extracting any Canadian resource, or for developing any Canadian industry is to sustain or improve the quality of Canadian life. Developments are only worthwhile if they contribute to the unity, strength and independence of our country; to the creation of communities that are healthy, varied, secure and stimulating; to the creation of challenging, long-lasting and rewarding jobs and investment opportunities for Canadians; and to safeguard our environment, including the vast natural areas so important to our culture and heritage.

Canadians must learn to live in balance with nature and their resources. We can learn a great deal from the Inuit and Indians who long ago developed a no growth society, using almost no resource that was not renewable. Their food, clothing, fuel and shelter all were derived from renewable resources. In the case of the Inuit they achieved this in one of the harshest and severe regions of the world.

We believe that this concept of balance must be incorporated into the decision-making process with respect to the future of Arctic Canada. This is especially important because our knowledge and understanding of Arctic ecosystems is still inadequate and incomplete and valuable resources may be lost if development is allowed over the entire face of the North.

One way to maintain this balance is to allocate areas for a variety of social and scientific reasons - wilderness and hunting, fishing and trapping reserves - the most important being that options still remain open as long as the land and water has not been changed and degraded. These options for future use are jeopardized or cancelled when a bull-dozer rips out trails and lines across the tundra and dams streams and rivers.

Wilderness might be best defined as "a remote area of unsettled land which is not yet being used for commercial purposes". The United States Wilderness Act considers wilderness "an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions".

Wilderness, as an ever increasing number of Canadians are discovering, is more than just rocks, plants, animals and water - more than just scenery. Wilderness is the opportunity to become attuned to the realities of nature, far removed from the artificialities of modern life. Wilderness is the opportunity to pit one's self against primitive conditions. And, increasingly, wilderness is a place for plants and animals which have nowhere else to go.

The Canadian Nature Federation believes that whatever is done north of 60, it must not significantly degrade, or destroy natural environments or significantly decrease wildlife populations.

I.B.P. Ecological Sites

The International Biological Programme (I.B.P.) recognized several years ago that biological and related values are vital scientific and economic

Canada's most basic to live in balance with nature and their resources. We can learn a great deal from the Inuit and Indians who long ago developed a no growth society, using almost no resource that was not renewable. Their food, clothing, fuel and shelter all were derived from renewable resources. In the case of the Inuit they achieved this in one of the harshest and severest regions of the world.

We believe that this concept of balance must be incorporated into the decision-making process with respect to the future of Arctic Canada. This is especially important because our knowledge and understanding of Arctic ecosystems is still inadequate and incomplete and valuable resources may be lost if development is allowed over the entire face of the North.

One way to maintain this balance is to allocate areas for a variety of social and scientific purposes - wilderness and hunting, fishing and trapping reserves - the most important being that options still remain open as long as the land and water has not been changed and degraded. These options for future use are jeopardized or cancelled when a full-blown oil and gas and lines across the tundra and down streams and rivers.

Wilderness might be best defined as "a remote area of unsettled land which is not yet being used for commercial purposes". The United States Wilderness Act considers wilderness "an area of undeveloped Federal land retaining its primitive character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions".

Wilderness, as an ever increasing number of Canadians are discovering, is more than just rocks, plants, animals and water - more than just scenery. Wilderness is the opportunity to become attuned to the realities of nature, far removed from the artificialities of modern life. Wilderness is the opportunity to put one's self against primitive conditions. And, increasingly, wilderness is a place for plants and animals which have nowhere else to go.

The Canadian Nature Federation believes that whatever is done north of 60, it must not significantly degrade, or destroy natural environments or significantly decrease wildlife populations.

I.B.P. Ecological Sites

The International Biological Programme (I.B.P.) recommended several years ago that biological and related values are vital scientific and economic

resources that have generally been neglected. In 1968 the Canadian Committee for I.B.P. was established and supported by the National Research Council. Panels of noted scientists were recruited for all the regions of Canada, including two panels for the North. The task of these panels was to select areas of biological, geological and historical importance that urgently require special protection.

In 1975 Panel 9 of the I.B.P. published a report entitled "Ecological Sites in Northern Canada" and Panel 10 published a report entitled "I.B.P. Ecological Sites in Subarctic Canada". These reports list the areas of the North deemed important for ecological reasons after careful study by the I.B.P. Panels. Copies of these reports were tabled last year at your hearings in Yellowknife.

Although the Government has had recommendations for the preservation of these areas for some time no action has been taken to allocate any of them. The Canadian Nature Federation urges that immediate attention be given to the reports of the I.B.P. Panels 9 and 10, as some of the proposed areas are threatened by oil and gas exploration and development and may be affected by the construction and maintenance of the proposed pipeline.

Canadian Arctic Wildlife Range

As ecologist George Calef wrote: "In the Northern Yukon lies a land richer in wildlife, in variety of landscape and vegetation, and in archaeological value than any other in the Canadian Arctic. Here high mountains, spruce forests, tundra, wide "flats" of lakes and ponds, majestic valleys, a major river delta and the Arctic seacoast come together to form the living fabric of an Arctic Wilderness".

And as the late Blair Fraser, a noted wilderness traveller said: "North lies a different kind of land - too barren ever to be thickly settled, too bleak to be popular . . . There is no doubt it will always be there, and so long as it is there, Canada will not die". Unfortunately, events of the past decade cast serious doubts as to whether the North of Calef and the North of Fraser will in fact "be there" as they knew it.

However, it is the considered opinion of the Canadian Nature Federation that a vital step towards preserving some of Arctic Canada and at the same time not interfering greatly with the exploitation of Arctic resources would be the creation of the Canadian Arctic Wildlife Range.

resources that have generally been neglected. In 1963 the Canadian Committee for I.B.P. was established and reported by the National Research Council. A series of noted scientists were recruited for all the regions of Canada, including two panels for the North. The task of these panels was to select areas of biological, geological and historical importance that urgently required special protection.

In 1973 Panel 7 of the I.B.P. published a report entitled "Ecological Sites in Northern Canada" and Panel 10 published a report entitled "I.B.P. Ecological Sites in Subarctic Canada". These reports list the sites of the North deemed important for ecological reasons after careful study by the I.B.P. Panels. Copies of these reports were mailed last year at your request to Yellowknife.

Although the Government has had recommendations for the preservation of these areas for some time no action has been taken to allocate any of them. The Canadian Nature Federation urges that immediate attention be given to the reports of the I.B.P. Panels 9 and 10, as some of the proposed areas are threatened by oil and gas exploration and development and may be affected by the construction and maintenance of the proposed pipeline.

Canadian Arctic Wildlife Range

An ecologist George Cafe wrote: "In the Northern Tundra there is a land richer in wildlife, in variety of landscape and vegetation, and in microclimatic values than any other in the Canadian Arctic. Here high mountains, spruce forests, tundra, wide "floods" of lakes and ponds, majestic valleys, a major river delta and the Arctic ocean meet together to form the living fabric of an Arctic wilderness."

And as the late Eric Spross, a noted wilderness traveller said: "North lies a different kind of land - not barren even to be thinly settled, not bleak to be popular. . . There is no doubt it will always be there, and so long as it is there, Canada will not die". Unfortunately, events of the past decade cast serious doubts as to whether the North of Cafe and the North of Spross will in fact "be there" as they knew it.

However, it is the considered opinion of the Canadian Nature Federation that a vital step towards preserving some of Arctic Canada and at the same time not interfering greatly with the exploitation of Arctic resources would be the creation of the Canadian Arctic Wildlife Range.

The proposed range would encompass about nine million acres in the Northern Yukon, contiguous to the already established Arctic National Wildlife Refuge in Alaska. Together they would form an 18 million acre International Arctic Wildlife Range. The proposed Range lies from the Alaska Yukon border south to the Porcupine River, east to just beyond the Bell River and north to the Beaufort Sea Coast just east of the Blow River. (A detailed description and maps are contained in an appendix to this submission).

There are many important reasons why this area should be protected. One of the most important is the area was free from ice during the Pleistocene glaciations. Therefore, the plants and animal species have existed there continuously for hundreds of thousands of years, evolving together. They are the hereditary sources of a large part of the present Canadian flora and fauna which spread eastward across the arctic lands and southward along the mountains after the glaciers retreated.

Another important reason for the proposed range is the protection of calving and summering grounds of the Porcupine Caribou herd - which numbers over 100,000. Every spring the great herd moves slowly northward - one of the last spectacular wildlife spectacles in the world. The caribou are vital to the survival of the native peoples of the area, who have hunted them for thousands of years. The herd does not respect international boundaries; it sometimes calves in Canada and sometimes in Alaska.

The area is also important for many species of birds - especially waterfowl and shorebirds. Tens of thousands of geese gather on the foothill tundra of the northern Yukon to build up a store of fat to power their migratory journey south. Many species nest in the area, particularly the Old Crow Flats - such species as scaup, scoters, oldsquaw, teal, swans, mallard and widgeon.

The proposed wildlife range also affords sanctuary to such rare species as the Peregrine Falcon, Golden Eagle and the Whistling Swan.

Some of the earliest records of man in North America have been discovered within the borders of the proposed range and a great deal of work needs to be done to fully probe and interpret these findings.

A major threat to the proposed Range and its counterpart in Alaska is the Canadian Arctic Gas pipeline to bring natural gas from Prudhoe Bay to southern North America. The suggested prime route of the pipeline would cut through both Ranges, causing considerable ecological damage and destroying the

The proposed range would encompass about nine million acres in the Northern Yukon, contiguous to the already established Arctic National Wildlife Refuge in Alaska. Together they would form an 18 million acre international Arctic Wildlife Range. The proposed range lies from the Alaska-Yukon border south to the Porcupine River, east to just beyond the Bell River and north to the Beaulieu Sea Coast just east of the Alou River. (A detailed description and maps are contained in an appendix to this submission).

There are many important reasons why this area should be protected. One of the most important is the area was free from ice during the Pleistocene glaciations. Therefore, the plants and animal species have existed there continuously for hundreds of thousands of years, evolving together. They are the hereditary sources of a large part of the present Canadian flora and fauna which spread eastward across the arctic lands and southward along the mountains after the glaciers retreated.

Another important reason for the proposed range is the protection of calving and summering grounds of the Porcupine Caribou herd - which numbers over 100,000. Every spring the great herd moves slowly northward - one of the last spectacular wildlife spectacles in the world. The caribou are vital to the survival of the native peoples of the area, who have hunted them for thousands of years. The herd does not respect international boundaries; it sometimes calves in Canada and sometimes in Alaska.

The area is also important for many species of birds - especially waterfowl and shorebirds. Tens of thousands of geese gather on the foothills of the northern Yukon to build up a store of fat to power their migratory journey south. Many species nest in the area, particularly the Old Crow Plateau - such species as osprey, scoters, oldsquaw, teal, swans, mallard and wilgeon.

The proposed wildlife range also affords sanctuary to such rare species as the Porcupine Wolf, Golden Eagle and the Whistling Swan.

Some of the earliest records of man in North America have been discovered within the borders of the proposed range and a great deal of work needs to be done to fully probe and interpret these findings.

A major threat to the proposed range and its counterpart in Alaska is the Canadian Arctic Gas pipeline to bring natural gas from Prudhoe Bay to southern North America. The suggested route of the pipeline would cut through both ranges, causing considerable ecological damage and destroying the

wilderness character of part of the area.

It is the opinion of the Canadian Nature Federation that this problem could be overcome, if permission to build a pipeline through the Range areas in Canada and Alaska was denied and the alternative "Fairbanks" Corridor route was utilized instead. This route, which follows the Alyeska Oil Pipeline route to Fairbanks, then the Alaskan Highway until it joins existing pipelines in northern British Columbia and Alberta. This has the advantage of utilizing ^{existing} rights-of-way along almost the entire route and minimizing ecological damage. If sufficient natural gas is found in the Mackenzie Delta, a pipeline could be constructed along the Dempster Highway to Dawson and south to Whitehorse.

The Government of Canada has a number of options if it wishes to move quickly to create the Canadian Arctic Wildlife Range, as follows:

1. Designate the area as a wildlife range under Section 18 (e) of the Yukon Territorial Lands Act.
2. Amend the Territorial Game Ordinance or promulgate regulations thereunder to set aside the area as a wildlife range.
3. Designate the area as a land management zone to achieve maximum protection of sensitive environmental values, under Section 3A of the Territorial Lands Act.
4. Designate an area under Section 4 of the Canada Wildlife Act as public lands required for wildlife research and conservation.

In October, 1970 an important conference was held for the purpose of studying the proposal to establish the Canadian Arctic Wildlife Range. A number of resolutions were passed, among them a resolution that the Government of Canada should act quickly to establish the proposed range. (Text of resolutions are contained in Appendix).

In 1971 a detailed concept for establishing and managing the range was forwarded to officials of the Department of Indian Affairs and Northern Development by officials of the Arctic International Wildlife Range *Society*.

The Canadian Nature Federation believes that since then the proposal, including detailed recommendations has been kept secret by the top-level bureaucrats of Indian Affairs and Northern Development. We further believe that this proposal should be given immediate attention and that a special committee be established to recommend how the proposal might best be implemented. This committee should include representatives from government, conservation

Wilderness character of part of the area.

It is the opinion of the Canadian Nature Federation that this problem could be overcome, if permission to build a pipeline through the range areas in Canada and Alaska was denied and the alternative "Fairbanks" corridor route was utilized instead. This route, which follows the Alaskan Oil Pipeline route to Fairbanks, then the Alaskan Highway until it joins existing pipelines in northern British Columbia and Alberta. This has the advantage of utilizing a right-of-way along almost the entire route and minimizing ecological damage. If sufficient natural gas is found in the Mackenzie Delta, a pipeline could be constructed along the Dempster Highway to Inuvik and south to Whitecourt.

The Government of Canada has a number of options if it wishes to

move quickly to create the Canadian Arctic Wildlife Range, as follows:

1. Designate the area as a wildlife range under Section 12 (a) of the Indian Territorial Lands Act.
2. Amend the Territorial Game Ordinances or promulgate regulations thereunder to set aside the area as a wildlife range.
3. Designate the area as a land management zone to achieve maximum protection of sensitive environmental values, under Section 1A of the Territorial Lands Act.
4. Designate an area under Section 4 of the Canada Wildlife Act as public lands reserved for wildlife research and conservation.

In October, 1970, an important conference was held for the purpose of studying the proposal to establish the Canadian Arctic Wildlife Range. A number of resolutions were passed, among them a resolution that the Government of Canada should act quickly to establish the proposed range. (Text of resolutions are contained in Appendix).

In 1971 a detailed concept for establishing and managing the range was forwarded to officials of the Department of Indian Affairs and Northern Development by officials of the Arctic International Wildlife Range.

The Canadian Nature Federation believes that since then the proposal, including detailed recommendations has been kept active by the top-level managers of Indian Affairs and Northern Development. We further believe that this proposal should be given immediate attention and that a special committee be established to recommend how the proposal might best be implemented. This committee should include representatives from government, conservation

associations, native organizations and industry.

Threatened Species

The Canadian Nature Federation believes that there is a small number of birds and mammals that should receive special protection because they are threatened with extinction because of a number of factors.

The International Union for the Conservation of Nature and Natural Resources classifies threatened species as follows:

Threatened species - Actively threatened with extinction. Continued survival unlikely without the implementation of special protective measures.

Rare - Not under immediate threat of extinction, but occurring in such small numbers and/or in such a restricted or specialized habitat that it could quickly disappear.

In the Mackenzie Delta the following species should receive special attention - Peregrine Falcon, Eskimo Curlew, Hudsonian Godwit, the Barren Ground Grizzly, and a little farther south, the well-known Whooping Crane. Hydro corridors should not be permitted anywhere near the Whooping Crane nesting grounds.

The Canadian Nature Federation believes that all these species should be the subject of special study and areas vital to their survival should be set aside as reserves.

RECOMMENDATIONS

Because the implications of the pipeline are so broad for northern development and for the future of Canada the Canadian Nature Federation requests that the following recommendations be given consideration before the final report to the Government of Canada is prepared:

1. A substantial part of the land and water areas north of the 60th parallel should be allocated for International Biological Program ecological sites, wildlife refuges, game sanctuaries, wilderness preserves, national parks, recreational areas, or hunting, trapping or fishing preserves.

Section 4 of the Canada Wildlife Act might be used to set vital areas aside until necessary legislation is passed.

associations, native organizations and industry.

Threatened Species

The Canadian Wildlife Federation believes that there is a small number of birds and mammals that should receive special protection because they are threatened with extinction because of a number of factors.

The International Union for the Conservation of Nature and Natural Resources classifies threatened species as follows:

Threatened species - Actively threatened with extinction. Continued survival unlikely without the implementation of special protective measures.

Rare - Not under immediate threat of extinction, but occurring in such small numbers and/or in such a restricted or specialized habitat that it could easily disappear.

In the Mackenzie Delta the following species should receive special attention - Porcupine Caribou, Eskimo Curlew, Hudsonian Goshawk, the Barren Ground Grackle, and a little farther north, the well-known Whooping Crane. These corridors should not be permitted anywhere near the Whooping Crane nesting grounds.

The Canadian Wildlife Federation believes that wildlife species should be the subject of special study and areas vital to their survival should be set aside as reserves.

Recommendations

Because the implications of the pipeline are so broad for northern development and for the future of Canada the Canadian Wildlife Federation requests that the following recommendations be given consideration before the final report to the Government of Canada is prepared:

1. A substantial part of the land and water areas north of the 60th parallel should be allocated for International Biological Program ecological sites, wildlife refuges, game sanctuaries, wilderness preserves, national parks, recreational areas, or hunting, trapping or fishing preserves.
- Section 4 of the Canada Wildlife Act might be used to set vital areas aside until necessary legislation is passed.

2. The Government of Canada should immediately establish the Canadian Arctic Wildlife Range. Further, the Government of Canada should negotiate an agreement with the United States to create the Arctic International Wildlife Range, which would combine the existing Arctic National Wildlife Refuge in Alaska with the proposed Canadian Range in the Yukon.
3. There should be much stricter enforcement of legislation enacted to protect the northern environment.
4. The Government of Canada should act immediately to set aside the areas recommended by Panels 9 and 10 of the International Biological Programme.

1. The Government of Canada should immediately establish the Canadian Arctic Wildlife Range. Further, the Government of Canada should negotiate an agreement with the United States to create the Arctic International Wildlife Range, which would include the existing Arctic National Wildlife Refuge in Alaska and the proposed Canadian Range in the Yukon.
2. There should be much stricter enforcement of legislation enacted to protect the northern environment.
3. The Government of Canada should act immediately to set aside the areas recommended by Panels 9 and 10 of the International Biological Programme.

Statement to the Mackenzie Valley Pipeline Inquiry to the Canadian Wildlife Federation and the Committee for Justice and Liberty
 Winnipeg.

Winnipeg, June 3, 1976.

1. Introduction

The Canadian Wildlife Federation (CWF) and the United Council of the Environment for North America (UCE) are pleased to have the opportunity to appear before the Inquiry and present their views on one of the most important resource development projects in this nation's history.

The Canadian Wildlife Federation is a national, non-profit organization representing over 200,000 individuals across Canada. It is dedicated to promoting conservation and the environment and the well-being of our natural resources.

The CWF Member is a **Statement** to the **to the** Mackenzie Valley Pipeline Inquiry

In our opinion, the Mackenzie Valley Pipeline Inquiry is a vital part of the process of making decisions about the future of our country. It is a process that we support and in which we hope to play a significant role.

2. The need for energy

Our discussion with these two groups shows that the Mackenzie Pipeline is essentially a north-south project. It is not a project for the construction of new oil refineries or other industrial projects in the south. The main reason for this is that the south is already well served by the existing oil pipeline system. It is the north's resources which constitute the sole reason for the construction of the Mackenzie Pipeline.

In the past, we northern Canadians, have been successful in securing the energy of the province and in raising consumption by increasing the sources of supply. It is fair to say that we are now facing a situation where our energy will be found and it is therefore important for solutions to the problems arising from increasing consumption where the problems themselves originate, at the source of consumption.

Mr. François Bregha
 Energy Analyst
 Canadian Wildlife Federation

THE UNIVERSITY OF CHICAGO

LIBRARY

1961

THE UNIVERSITY OF CHICAGO

LIBRARY

1961

THE UNIVERSITY OF CHICAGO

LIBRARY

1961

Statement to the Mackenzie Valley Pipeline Inquiry by the Canadian Wildlife Federation and the Committee for Justice and Liberty Foundation.

Ottawa, June 3, 1976.

I Introduction

The Canadian Wildlife Federation (CWF) and the Ottawa Local of the Committee for Justice and Liberty Foundation (CJL) welcome this opportunity to appear before the Inquiry and present their views on one of the most important resource development projects in this nation's history.

The Canadian Wildlife Federation is a national, non-profit organization representing over 230,000 individuals across Canada. It is dedicated to promoting respect for our environment and the wise use of our natural resources.

The CJL Foundation is an independent organization which seeks to present an alternative vision, viewpoint and policies based on the Christian principles of justice, stewardship, love and compassion.

In our presentation before this Inquiry, we want to discuss briefly a few of the broader questions raised by the construction of a Mackenzie pipeline.

II The need for context

CWF disagrees with those who state that the Mackenzie Pipeline is essentially a northern problem. It is not. The impulse for its construction as well as the construction of other frontier projects -- the James Bay hydro-electric development the Nanisivik mine just to name two -- comes from the South. It is the South's appetite for resources which constitutes the sole raison d'être for the exploitation of the North on this grandiose scale.

In the past, we southern Canadians, have been successful in attenuating the urgency of the problems posed by rising consumption by developing new sources of supply. It is fair to say that we are now reaching the last frontier where new sources will be found and it is therefore time to start looking for solutions to the problems arising from increasing consumption where the problems themselves originate, at the centres of consumption.

The pipeline and other frontier projects are thus not fundamentally northern problems: they are southern problems and, as such, must be analyzed in the context of present southern lifestyles and the economic and environmental pressures which they generate.

The need for placing the pipeline in a broad perspective is highlighted by the implications of its construction:

- the pipeline will affect decisively the rate, direction and purpose of northern development;
- it will exert a large impact on Canadian natural gas policy as it will influence this country's gas exports, the timing of a Polar gas pipeline, the rate of growth in domestic consumption and the price of this fuel on Canadian markets. As a result, the pipeline's construction would have a considerable effect on Canada's energy policy;
- more importantly, the pipeline represents a development package of which the trunk line is but one component in a series of investments encompassing exploration, development, gathering lines, processing plants, civil infrastructure, etc., which, together, constitute a significant commitment of capital, technology and human resources whose opportunity cost has not been fully evaluated. This opportunity cost includes the foreclosure of alternative development options, a problem to which we shall return later.

III The Pipeline and Canadian Energy Policy

What is the context in which the Mackenzie pipeline must be examined? We do not propose in this brief to offer a detailed description of that context. Rather, we shall emphasize three particular aspects, whose consideration by this Inquiry we feel is of fundamental importance.

1) Energy supply and demand

In 1975, primary energy consumption in Canada was of the order of 7.8 trillion Btu's. This was more than double what Canadians consumed in 1960.⁽¹⁾ In An Energy Strategy for Canada, the Federal Government declared its commitment to lower the rate of growth in energy demand to 3.5 per cent annually, which means that energy consumption will now double in 20 years rather than 15 as was the case historically.

The pipeline and other frontier projects are not automatically
northern projects. They are frontier projects and, as such, they are
involved in the process of economic development and the economic
and environmental progress with they generate.

The need for fixing the pipeline in a broad perspective is
highlighted by the requirements of the construction:
- the pipeline will affect directly the rate, direction and purpose
of northern development;

- it will exert a large impact on Canadian economic policy as it
will influence this country's gas exports, the timing of a future gas
pipeline, the rate of growth in domestic consumption and the rate of
this fuel on Canadian markets. As a result, the pipeline's construction
would have a considerable effect on Canada's energy policy;
- more important, the pipeline represents a development package in
which the main line is but one element in a series of investments
encompassing exploration, development, processing, transmission, storage
and distribution, etc., which, together, constitute a significant
commitment of capital, technology and human resources whose economic
cost has not been fully evaluated. This opportunity cost includes the
forfeiture of alternative development options, a priority to which we
shall return later.

III The Pipeline and Canadian Energy Policy

What is the context in which the pipeline question must be considered?
We do not propose in this brief to offer a detailed description of that
context. Rather, we shall emphasize those particular aspects, which
constituted by this industry we feel is of fundamental importance.

1) Energy supply and demand

In 1975, primary energy consumption in Canada was of the order of
1.8 trillion Btu's. This was more than double what Canadian consumed in
1960. In an Energy Strategy for Canada, the Federal Government declared its
commitment to lower the rate of growth in energy demand to 3.5 per cent
annually, which means that energy consumption will now double in 20 years
rather than 15 as was the case historically.

In order to meet forecast demand, the Government estimates that the energy sector will require \$180 billion between 1976 and 1990.⁽²⁾ This projected investment represents an appreciably larger share of the Gross National Product than has traditionally been allocated to the energy sector.⁽³⁾ As a result, we can expect energy investments to displace investments in other sectors of the economy, such as housing. Indeed, the average annual increase in energy-related expenditures over the next 15 years will be roughly equivalent to 50 per cent of the total investment in residential construction in 1975.⁽⁴⁾

It is difficult to evaluate the economic impact of such a restructuration of the Canadian economy. It is not unreasonable to expect, however, inflationary pressures to be heightened, interest rates to rise and small borrowers to be disproportionately affected by the scarcity of available capital.⁽⁵⁾

In order to supply projected demand, the size of the energy industries will double in the next 15 years,⁽⁶⁾ which means that the new energy projects, such as arctic pipelines, generate a substantial energy demand in themselves. In other words, the net energy return from these projects, once all the energy inputs have been accounted for, is decreasing over time.

The unprecedented magnitude of the energy investments contemplated over the next decade and a half and their potentially disruptive economic impact invite careful scrutiny of their desirability.

The Geological Survey of Canada has recently downgraded substantially its earlier estimates of Canada's ultimate oil and gas potential. The new estimates place this potential at but one third of what had been previously thought to exist and make it clear, therefore, that fully one half of Canada's oil potential and one third of the gas potential have already been discovered.⁽⁷⁾

These new estimates, too, may be optimistic as they do not take economic factors into account.

A concrete manifestation of the revised outlook of Canada's hydrocarbon reserves is provided, of course, in the case of the Mackenzie Delta where the expenditures of hundreds of millions of Dollars have yielded between 4 and 7 trillion cubic feet of gas, not enough to justify the construction of a pipeline. The realization that we are fast approaching the economically

In order to meet future demand, the Government estimates that the energy sector will require \$100 billion between 1970 and 1990.⁽¹⁾ This projected investment requirement is substantially larger than the \$50 billion that the Government has estimated for the energy sector.⁽²⁾ As a result, we can expect energy investments to be higher in other sectors of the economy, such as housing, industry, the private sector, etc. in energy-related expenditures than the past. It seems that the energy sector is equivalent to 30 per cent of the total investment in residential construction in 1970.⁽³⁾

It is difficult to evaluate the economic impact of such a transformation of the Canadian economy. It is not necessary to be pessimistic, but it is necessary to be realistic. Investment in the energy sector will be substantially higher than in other sectors, and small businesses to be disproportionately affected by the energy sector.⁽⁴⁾

In order to supply projected demand, the use of the energy industry will double in the next 20 years.⁽⁵⁾ This means that the energy industry, such as electric utilities, gas, oil, and coal, will be the main source of energy. The energy industry will be the main source of energy, and the energy industry will be the main source of energy.

The projected increase of the energy investment requirement over the next decade and a half and the increasing demand for energy will be a major factor in the development of the energy industry.

The Geological Survey of Canada has recently completed a study of the energy resources of Canada. The study has estimated that the potential of the energy resources of Canada is equivalent to the potential of the energy resources of the United States. The study has also estimated that the potential of the energy resources of Canada is equivalent to the potential of the energy resources of the United States. The study has also estimated that the potential of the energy resources of Canada is equivalent to the potential of the energy resources of the United States.

A concrete evaluation of the energy resources of Canada is provided, of course, in the case of the hydroelectric potential. The hydroelectric potential of Canada is estimated to be equivalent to the potential of the hydroelectric resources of the United States. The hydroelectric potential of Canada is estimated to be equivalent to the potential of the hydroelectric resources of the United States. The hydroelectric potential of Canada is estimated to be equivalent to the potential of the hydroelectric resources of the United States.

exploitable limits of our hydrocarbon resources makes a compelling argument in favour of reducing the rate of development of these resources and devoting larger efforts to energy conservation. Indeed, according to the Government's An Energy Strategy for Canada, "energy conservation provides the most immediate method of relieving our energy problems" and "as a nation, we are at a point in time when it is less costly to save energy than to produce more of it."⁽⁸⁾

The economic impact of future energy investments, our limited resource base and the attractiveness of energy conservation constitute three independent factors which militate in favour of delaying, if not of foregoing the construction of a Mackenzie pipeline.

2) Concentration of power

A second aspect of Canada's present energy situation which we wish to bring to your attention is the accelerating trend towards large, centralized energy systems. Centralized energy systems -- such as a large diameter pipeline -- tend to concentrate economic and political power. In the words of Amory Lovins,⁽⁹⁾

Decisions about who will have how much energy at what price also become centralized, a convenience for those at the centre, but politically dangerous because it divides those who use energy from those in big business and big government who supply and regulate it.

Public participation is also discouraged by the increasingly complex issues raised by large energy projects. These projects are not only sophisticated technologically but their social, economic and environmental impacts often exceed the understanding of any one group of individuals. Decision-makers will too often emphasize these complexities in justifying the lack of effective public participation. The concentration of energy supply into a few, extremely large projects must be regarded, therefore, as a development which potentially restricts the rights of individuals to participate in the determination of their own future.

3) The foreclosure of options

The "standard forecasts" presented by both industry and government are premised on the continuation of a steady rate of growth in energy demand over the foreseeable future. The implementation of these forecasts

exploitable limits of our hydrocarbon resources and a corresponding
argument in favour of reducing the rate of development of these
resources and devoting larger efforts to energy conservation. Indeed,
according to the Government's Energy Strategy for Canada, "energy
conservation provides the most immediate method of reducing our energy
problem" and "as a nation, we are at a point in time when it is
likely to save energy than to produce more of it."
The economic impact of future energy requirements, not limited
to production costs and the attractiveness of energy conservation
three independent factors which militate in favour of delay. If not
forfeiting the construction of a sustainable pipeline.

2) Conservation of power

A second aspect of Canada's present energy situation which we wish
to bring to your attention is the accelerating trend towards large
centralized energy systems. Centralized energy systems -- such as a
large diameter pipeline -- tend to concentrate economic and political power
in the hands of a few.

Businesses and individuals who will have to supply energy at what
prices will become centralised, a concentration of power
at the centre, but politically dispersed between
dividing those who use energy from those in the business
and the government who supply and regulate it.

Public participation is also threatened by the increasingly complex
issues raised by large energy projects. These projects are not only
technologically sophisticated but also socially, economically and environmentally
impactful. The understanding of the nature of the project
decision-makers will not often emphasize those highlighted in justifying
the lack of effective public participation. The concentration of energy
supply into a few, extremely large projects must be reduced, therefore,
as a development which potentially restricts the rights of individuals to
participate in the determination of their own future.

3) The importance of options

The "standard forecasts" presented by both industry and government
are predicated on the continuation of a steady rate of growth in energy
demand over the foreseeable future. The legitimization of these forecasts

will require a single-minded commitment to the task of developing new energy sources, a commitment made necessary by the unprecedented scale of the projects contemplated and their enormous cost. The marshalling of the capital, human and technological resources "for the big, tough, expensive job of developing petroleum supplies" will have to be so total as to preclude the pursuit of alternative policy directions.

The reasons behind this foreclosure of options are not difficult to understand. One of these has to do with the impact which large energy projects may exert on energy demand. In order for the cost of large energy projects to be amortized successfully, these projects will have to be operated at optimum capacity for their economic lifetime. The possibility of an interruption in deliveries -- even a short one -- is prohibitively expensive to contemplate and explains the great lengths at which Canadian Arctic Gas is prepared to go (use of crack arrestors, dual river crossings) to guarantee continued gas flow once the pipeline starts its operation.

Thus, the financial viability of these projects requires that a demand for their product, energy, be guaranteed. Once the tap is turned on, it cannot be turned off. Large energy projects, therefore, if they do not actually stimulate demand, may at least discourage the implementation of vigorous conservation measures.

Secondly, the dedication of capital and technology to fulfill the standard forecast will not leave sufficient resources to experiment in other directions. A direct trade-off will thus have to be made: shall we allocate our scarce resources to increasing offshore drilling or to installing solar panels for homes? We shall not be able to do both.

The implementation of the standard forecast may lock us into a self-perpetuating pattern of development where growth in energy demand generates yet larger and costlier energy projects which, in turn, stimulate further rises in demand. The adoption of this pattern of development poses several substantial risks among which are economic disruption and the accelerated depletion of non-renewable resources.

It is of fundamental importance to understand that the option characterized by the standard forecast and any other option, such as the

conservation society, are mutually exclusive. This is what is meant by the foreclosure of options. Furthermore, only limited time remains to make a choice between the two options. According to Amory Lovins,⁽¹⁰⁾

Delay in conservation will let wasteful use run on so far that the logistical problems of catching up become utterly insuperable. Delay in widely deploying the soft technologies pushes them so far into the future that there is no longer a credible fossil-fuel bridge to them: they must be well underway before the most serious part of the oil-and-gas decline begins.

It is imperative, therefore, that Canadians today have the opportunity to make a conscious choice before the present incrementalist approach locks us irremediably into the first option.

IV Conclusion

The construction of the proposed Mackenzie Valley pipeline raises numerous questions about both the need for and impact of such a project. The former concern is usually discussed in terms of the demand for and supply of natural gas. Rarely is it put in the broader framework of the total Canadian energy picture; never does it distinguish between economic demand and human need nor define what human need constitutes.

In the above section, we have tried to outline briefly the context in which we feel the Mackenzie pipeline must be viewed. We suggested that this context was characterized by a steadily increasing energy demand which will necessitate the construction of large and expensive energy projects. The cumulative impact of this trend, we submit, will be to accelerate the depletion of our non-renewable resources, centralize further the distribution of political and economic power and foreclose alternative energy futures as our efforts become increasingly dedicated to the task of increasing energy supplies.

A decision on whether or not to build the pipeline cannot be reached meaningfully outside of this context as the pipeline would profoundly influence the direction of Canadian energy policy. The extent of that influence will of course depend on the timing of the pipeline's construction. We respectfully submit, therefore, that this Inquiry consider the question of timing in its report as, in our view, it logically forms part of the Inquiry's mandate to recommend terms and conditions which will minimize the pipeline's adverse impact.

conserve energy, are mutually exclusive. This is one of the reasons for the importance of energy conservation, which is limited to the extent of the choice between the two options. According to the report,

Delay in construction will be avoided as far as possible, but the physical problems of construction are not always avoidable. Delay is still required, however, to allow for the construction of the new facilities. It is not possible to avoid the delay in the construction of the new facilities, but it is possible to avoid the delay in the construction of the old facilities.

It is important, therefore, that the government should have the authority to make a decision about the construction of the new facilities, and to make a decision about the construction of the old facilities, as it is necessary to make a decision about the construction of the new facilities, and to make a decision about the construction of the old facilities.

IV. Conclusion

The construction of the proposed Mackenzie Valley pipeline is a major project, and it is necessary to make a decision about the construction of the new facilities, and to make a decision about the construction of the old facilities. The project is a major project, and it is necessary to make a decision about the construction of the new facilities, and to make a decision about the construction of the old facilities. The project is a major project, and it is necessary to make a decision about the construction of the new facilities, and to make a decision about the construction of the old facilities.

In the above section, we have tried to outline briefly the context in which we have the Mackenzie pipeline project. We suggested that this context was characterized by a steadily increasing energy demand which will necessitate the construction of large and expensive energy projects. The cumulative impact of this trend, we submit, will be to accelerate the depletion of our non-renewable resources, and to increase the risk of a global energy crisis. It is our belief that the government should have the authority to make a decision about the construction of the new facilities, and to make a decision about the construction of the old facilities.

A decision on whether or not to build the pipeline cannot be reached until the government has made a decision on the pipeline's construction. The government's decision on the pipeline's construction will be a major decision, and it is necessary to make a decision about the construction of the new facilities, and to make a decision about the construction of the old facilities. The government's decision on the pipeline's construction will be a major decision, and it is necessary to make a decision about the construction of the new facilities, and to make a decision about the construction of the old facilities. The government's decision on the pipeline's construction will be a major decision, and it is necessary to make a decision about the construction of the new facilities, and to make a decision about the construction of the old facilities.

The problems posed by the construction of a Mackenzie pipeline are not so much of a technical nature as they are ethical. On one level, is the issue of the native people's rights and their land claims. Earlier this year, Mr. Maurice Strong, Chairman of Petrocanada, stated in a speech in Calgary:⁽¹¹⁾

Those who must bear the environmental and social costs of energy development should participate fully in the decisions concerning such development and in the benefits derived from it. To do otherwise would involve exploitation that is incompatible with the basic concepts of equity and justice which provide the moral underpinnings of our society as well as its effective functioning as a democracy.

To impose development in the Mackenzie Valley over the wishes of its residents would violate the very concepts of equity and justice Mr. Strong refers to.

On a broader level, we must ask fundamental questions about the direction of Canadian society. Should our overriding goal continue to be the maximization of economic growth? Or should we, conversely, start stressing more qualitative goals such as a cleaner and healthier environment, a more equitable distribution of wealth, increased work satisfaction, etc?

Failure to ask these questions will constitute an abrogation of our collective responsibilities with far-reaching consequences for this nation's future.

V Recommendations

We recommend that a Mackenzie Valley pipeline not be built until the following conditions have been met:

- 1) native land claims have been settled to the satisfaction of all parties;
- 2) environmental impact studies regarding all developments associated with the pipeline (highway, gathering systems, etc.) have been completed;
- 3) a national energy policy stating the goals of such a policy and its role in a national industrial strategy has been drafted and

The problem posed by the construction of a modern system
and not so much of a technical nature as that of a political
level, is the issue of the native people's rights and their future.
Facilities this year, Mr. Secretary, Chairman of the Council, etc.,
as a speech in 1967.

There are many more than the most common and most recent
of energy development which is the most important factor in the
development of the country and the people. To the extent that the
country is concerned with the future of the country, it is
essential that the country should be able to develop its
energy and resources which provide the most important
of our country as well as the most important factor in
a country.

To Japan, development in the Japanese Valley is the source of the
country's wealth which is the source of energy and growth.

Mr. Secretary, etc.

In a broader level, we are not concerned with the
development of the country, but with the development of the
country as a whole. To the extent that the country is
concerned with the future of the country, it is
essential that the country should be able to develop its
energy and resources which provide the most important
of our country as well as the most important factor in
a country.

There are many more than the most common and most recent
of energy development which is the most important factor in the
development of the country and the people. To the extent that the
country is concerned with the future of the country, it is
essential that the country should be able to develop its
energy and resources which provide the most important
of our country as well as the most important factor in
a country.

7. Recommendations

- We recommend that a Japanese Valley project be set up to
the following conditions have been met:
- 1) native land claims have been accepted in the development of all
parties;
 - 2) environmental impact studies regarding all development activities
with the pipeline (highway, railway, etc.) have been
completed;
 - 3) a national energy policy setting the goals of such a policy and its
role in a national industrial strategy has been adopted and

submitted for public discussion;

- 4) alternatives to the construction of a Mackenzie pipeline, including the renegotiation of gas exports, the construction of a Polar Gas line, the upgrading of southern gas deliverability, etc., have been thoroughly examined to determine whether the construction of a Mackenzie pipeline could be foregone altogether;
- 5) a comprehensive energy conservation programme has been launched.

submitted for public discussion;

- 4) alternatives to the construction of a Keweenaw pipeline, including the transportation of gas by water, the construction of a water gas line, the utilization of water gas technology, etc., have been thoroughly examined in determining whether the construction of a Keweenaw pipeline would be the most appropriate;
- 5) a comprehensive review conducted in 1974-1975 has been completed.

FOOTNOTES

- 1) Department of Energy, Mines and Resources:
An Energy Strategy for Canada/Policies for Self-Reliance
(Information Canada, 1976) page 161, Table II
- 2) Ibid, page 108
- 3) Ibid, page 106
- 4) Ibid
- 5) Ibid, page 111
- 6) Ibid, page 53
- 7) Ibid, pages 62, 63
- 8) Ibid, pages 28, 131
- 9) Amory Lovins: Energy Strategy: the Road not Taken?
(unpublished manuscript) page 25
- 10) Ibid, page 32
- 11) Notes for Remarks by Maurice Strong at
"Energy: Rights and Responsibilities, Calgary, March 21, 1976.

- 1) Department of Energy, Mines and Resources
An Energy Strategy for Canada: Options for 2011-2020
 (Ottawa: Canada, 2010) page 100, Table 11
- 2) Ibid, page 100
- 3) Ibid, page 100
- 4) Ibid
- 5) Ibid, page 111
- 6) Ibid, page 77
- 7) Ibid, pages 67, 69
- 8) Ibid, pages 10, 11
- 9) Energy Outlook: Trends and Prospects for 2011-2020
 (Ottawa: Canada, 2010) page 11
- 10) Ibid, page 11
- 11) Options for Canada's Energy Future
 (Ottawa: Energy, Mines and Resources, 2010) page 11, 12

SUBMISSION
to the
Mackenzie Valley Pipeline Inquiry

by
TERRY MEAGHER
President

CANADIAN ASSOCIATION IN SUPPORT OF THE NATIVE PEOPLES

National Office
251 Laurier Ave. W., Suite 904
OTTAWA, Ontario K1P 5J6
Telephone: 613 236-7489

OTTAWA, Ontario
June - 1976

WUSKINISTON

to the

Wuskinist "Alley Pipeline Lodge"

TEAR, WUSKIN

Wuskinist

WUSKINIST ASSOCIATION IN SUPPORT OF THE NATIVE PEOPLE

OTTAWA, Ontario
June - 1972

Telephone: 613 524-7422
OTTAWA, Ontario K1P 2J6
151 Laurier Ave. W., Suite 904
National Office

SUBMISSION TO THE MACKENZIE VALLEY PIPELINE INQUIRY
BY THE
CANADIAN ASSOCIATION IN SUPPORT OF THE NATIVE PEOPLES

Mr. Commissioner:

The Canadian Association in Support of the Native Peoples is pleased to have the opportunity to address the Commission at this time. Our members across Canada are deeply concerned about the issues under consideration here.

The Association is a national voluntary citizens' organization that works to promote the public awareness and understanding of Native rights and objectives so necessary to the achievement of full and equal Native participation in Canadian society.

The Association has a long record of activity on behalf of the rights of the first citizens of Canada. For several years we have tangibly supported Native groups across Canada in their efforts to achieve a just settlement of land claims. We have formally supported the Dene Declaration. Please accept "Why CASNP supports the Dene Declaration" as an exhibit.

More recently CASNP, Inuit Tapirisat of Canada, the Indian Brotherhood of the Northwest Territories and the Metis Association of the Northwest Territories have worked together to inform Canadians about the rights, culture, and aspirations of the Native People of the N.W.T. In cooperation with church, labour, environmental, and other groups we sponsored Native Land Settlements Week, March 7-13, 1976 which gave Native people from the North the opportunity to discuss

BY THE

CANADIAN ASSOCIATION IN SUPPORT OF THE NATIVE PEOPLE

Mr. Commissioner

The Canadian Association in support of the Native People is pleased to have the opportunity to address the Commission at this time. Our members across Canada are deeply concerned about the Native people's condition here.

The Association is a national voluntary citizens' organization that works to promote the public awareness and understanding of Native rights and objectives as necessary to the achievement of full and equal Native participation in Canadian society.

The Association has a long record of activity on behalf of the rights of the First Nations of Canada. For several years we have actively supported Native groups across Canada in their efforts to achieve a just settlement of land claims. We have formerly supported the "Beau Belvedere" Native group. Please accept my best regards to the "Beau Belvedere" as an exhibit.

More recently CANAP, Inc. visited at Canada, the Indian Brotherhood of the Northwest Territories and the Native Association of the Northwest Territories have worked together to inform Canadians about the rights, culture, and aspirations of the Native people of the N.W.T. In cooperation with church, labour, environmental, and other groups we sponsored Native Land Settlement Week, March 7-13, 1975 which gave Native people from the North the opportunity to discuss

with southern Canadians their land claims and how resource development will affect them.

When these people appeared before southern audiences, they explained their land settlement proposals and the reasons for their insistence on a significant measure of control over development. On each occasion they won understanding and support from the majority of the non-Native people who heard them. We would like to submit our report on the Land Settlements Week as an exhibit to the Commission.

The Canadian Association in Support of the Native Peoples agrees with the position of the Inuit and Dene Peoples of the Northwest Territories -- that just land settlements that insure meaningful Native participation in decisions about northern development -- precede any decision on the building of the Mackenzie Valley Pipeline.

The Inquiry has heard many considerations regarding the proposed pipeline. The questions of energy and economics are predominant ones and will be certain to preoccupy all Canadians for many years to come. Our Association recognizes that these issues are vital ones. But we must remind you that unchecked resource extraction prior to land settlements and prior to a comprehensive national energy policy will create long-term problems for the sake of a short-term solution.

We believe that there are three major reasons why land settlements must be dealt with prior to pipeline construction:

It is impossible to believe that oil and gas companies could make sound business decisions which will affect all of us ultimately as energy users without knowing the economic and environmental guidelines which are bound to be a part of any land settlement.

Secondly, land settlements that insure Native participation

2000

with southern Canadians their land claims and how resource development will affect them.

When these people appeared before southern audiences, they explained their land development proposals and the reasons for their insistence on a significant measure of control over development. On each occasion they were understanding and supportive of the rights of the non-Native people who heard them. The people like to submit our report on the land development work as an exhibit to the Commission.

The Canadian Association in support of the Native Peoples agrees with the position of the Inuit and Dene Peoples of the Northwest Territories -- that they have settlements that involve meaningful Native participation in decisions about resource development -- however they insist on the principle of the Northwest Territories.

The industry has been very cooperative in providing the proposed pipeline. The question of energy and transportation development does and will be central to development all Canadian for many years to come. The Association recognizes that these issues are vital ones. But we must remind you that proposed resource extraction prior to land settlements and prior to a comprehensive national energy policy will create long-term problems for the sake of a short-term solution.

We believe that there are three major reasons why land settlements must be dealt with prior to pipeline construction. It is impossible to believe that oil and gas companies could make sound business decisions which will affect all of us ultimately as energy users without knowing the economic and environmental questions which are bound to be a part of any land settlement. Secondly, land settlements that involve Native participation

in protecting the environment of the North are in the best interests of all Canadians. The people who for generations have stored up such intimate knowledge of the land have much to offer in protecting the great natural heritage we all share.

In addition, Native participation in development could result in more positive social and economic contributions by Native people to their own communities and to Canada.

These then constitute the practical reasons for a land settlement first.

On a moral level, we as Canadians of the dominant group have one of the few chances left to deal fairly with the original inhabitants of this country. Let us not miss it. The history of our treatment of Native peoples is shabby. If we do not at this time deal honorably with the Dene and Inuit of the Northwest Territories, we will continue to generate a legacy of grief, of broken cultures, and of humiliating dependency.

This need not be the case. There is still time, if we choose, to work with the Native people of the North to build a partnership in confederation from which we can all benefit.

We can begin by listening to the Native people who have addressed this inquiry and acknowledging, perhaps for the first time, the right of Native people to determine their own future within a unified Canada.

in processing the development of the North and in the past interests of all Canadians. The people who for generations have stood up for the knowledge of the land have had to offer in processing the great natural heritage we all share.

In addition, active participation in development could result in more positive social and economic contributions by Native people to their own communities and to Canada.

These then constitute the practical reasons for a land

Settlement Policy

On a moral level, we as Canadians of the dominant group have one of the few choices left to deal fairly with the original inhabitants of this country. Let us not miss it. The history of our treatment of Native people is shameful. It is not as this time that we inevitably with the time and talent of the Northwest Territories, we will continue to generate a legacy of guilt, of social injustice, and of humiliating dependency.

This need not be the case. There is still time. It is

choice, to work with the Native people of the North to build a

partnership in consultation from which we can all benefit.

We can begin by listening to the Native people who have

addressed this inquiry and acknowledged, because for the first

time, the right of Native people to determine their own future within

a united Canada.

A BRIEF TO THE

MACKENZIE VALLEY PIPELINE INQUIRY

SUBMITTED BY:

Jean Fairholm

Bill Harrington

Kathy Langston

Patrick Langston

David Seaborn

Carol Sissons

Suzanna Van den Heuvel

Clarence Tomatuk

Jean Fairholm
Bill Harrington
Kathy Langston
Patrick Langston
David Seaborn
Carol Sissons

Suzanna van den Heuvel
Clarence Tomatuk

AN OTTAWA CROSS-CULTURAL STUDY GROUP

June 3, 1976

MACKEWIE VALLEY PIPELINE INQUIRY
A BRIEF TO THE

SUBMITTED BY:

John F. Adams
Ellen Harrison
Kathy Langston
Patrick Langston
David Seaborn
Carol Stinson
Suzanne Van den Heuvel
Clarence Tinsley

The group presenting this brief grew out of an involvement in a six-week study program run by the Ottawa YM-YWCA in the fall of 1975. At that time approximately 15 individuals of varying ages, backgrounds and from different parts of Canada took part in a cross-cultural study of Native peoples in Canada. Through films, roleplays, reading and discussion we attempted to explore some of the prevalent attitudes, including our own, towards Native peoples and some of the issues currently in the press such as mercury poisoning at Grassy Narrows. At the end of the program a number of us wished to continue to be involved in current issues affecting the future of all Canadians.

When the Native people of the N.W.T. decided to have a national Land Claims week March 7-13, 1976 to help inform southern Canadians about how they felt about their land, their life, and the future of their people in the N.W.T. we felt we wanted to become involved in learning more about the issues surrounding the Native Land Claims in Northern Canada and helping others learn more about them. We became involved in the organization and activities of the Land Claims week and gained support for these activities from the Board of Directors of the Ottawa YM-YWCA. At their February 26th meeting the Board approved the following statement for support for:

- (a) The efforts of the Native peoples of Canada to achieve fair settlement of their land claims;
- (b) efforts to settle land claims prior to any planned exploration resource utilization or development being undertaken;

The group presenting this brief grew out of an involvement in a six-week study program run by the Ottawa YM-YWCA in the fall of 1975. At that time approximately 15 individuals of varying ages, backgrounds and from different parts of Canada took part in a cross-cultural study of Native peoples in Canada. Through films, readings and discussion we attempted to explore some of the prevalent attitudes, including our own, towards Native peoples and some of the issues currently in the press such as mercury poisoning at Grassy Narrows. At the end of the program a number of us wished to continue to be involved in current issues affecting the future of all Canadians.

When the Native people of the N.W.T. decided to have a national Land Claims week March 7-13, 1976 to help inform southern Canadians about how they felt about their land, their life, and the future of their people in the N.W.T. we felt we wanted to become involved in hearing more about the issues surrounding the Native Land Claims in Northern Canada and helping others learn more about them. We became involved in the organization and activities of the Land Claims week and gained support for these activities from the Board of Directors of the Ottawa YM-YWCA. At their February 25th meeting the Board approved the following statement for support for:

- (a) the efforts of the Native peoples of Canada to achieve fair settlement of their land claims;
- (b) efforts to settle land claims prior to any planned exploration resource utilization or development being undertaken;

- (c) the efforts of southern Canadian to become better informed of the issues of northern development with specific reference to Native peoples and to participate in activities such as the Native Land Claims Week and the Berger Commission hearings which will help present the position of the Native peoples to the public and the government.

During the course of our involvement friends have become interested and the present group has expanded to include those not in the original study program. This introduction is to make it clear that we have no special expertise or knowledge of the North. We should also make clear that to date the involvement of the Board of the Ottawa YM-YWCA has been limited to the statement quoted and therefore to supporting study and involvement of groups such as ours. The views which we express here do not necessarily represent those of the Ottawa YM-YWCA. What we present here are our strong feelings about what we have come to believe is the direction of northern development which is in our own best interest. We have reached this position as a result of studying the issues related to the potential impact of a gas pipeline in the Mackenzie Valley.

After looking at the issues carefully we feel strongly that there should be no pipeline until the land claims of the Dene people in the Mackenzie Valley have been justly settled. We have a number of reasons for believing that such a position is the most just and in the long run the most beneficial to building the kind of society we wish for Canada.

(c) the efforts of southern Canadian to become better informed of the issues of northern development which specific reference to Native peoples and to particular activities such as the Native Land Claims Work and the Berger Commission hearings which will help present the position of the Native peoples to the public and the government.

During the course of our involvement friends have become interested and the present group has expanded to include those not in the original study program. This introduction is to make it clear that we have no special expertise or knowledge of the North. We should also make clear that to date the involvement of the Board of the Ottawa YM-YWCA has been limited to the statement quoted and therefore to supporting study and involvement of groups such as ours. The views which we express here do not necessarily represent those of the Ottawa YM-YWCA. What we present here are our strong feelings about what we have come to believe is the direction of northern development which is in our own best interest. We have reached this position as a result of studying the issues related to the potential impact of a gas pipeline in the Mackenzie Valley.

After looking at the issues carefully we feel strongly that there should be no pipeline until the land claims of the Inuit people in the Mackenzie Valley have been justly settled. We have a number of reasons for believing that such a position is the most just and in the long run the most beneficial to building the kind of society we wish for

The following statement by one member of the group, outlining how she personally became involved in understanding the injustices in Canadian Native-White relationships illustrates in depth our feeling for the issues.

"I find it a bit difficult to find the right words to express what was a very strong emotional experience, but the change in my perception towards the Native peoples of this country came about through my response to a carving of the Haida creation myth by the Haida artist Bill Reid. My reaction was a spiritual experience which, over the last two years has drastically changed my opinion of our dominant white society and our Government's relationship with the Native peoples.

Up to the time of this involvement, I believed myself to have the proper right liberal attitude towards the problem of discrimination, I believed I was prejudiced towards no race or nationality. But from my involvement with the art of the Haida peoples of British Columbia I realized how ignorant I was about these people and the Native peoples of Canada in general. I was ashamed of this and realized that my indifference and ignorance had been as ugly as the apparent and open racism shown by some of the visitors to Bill Reid's 25th year retrospective exhibition at the Vancouver Art Gallery in November 1974. I overheard a few of these visitors comment to the effect that they were surprised at seeing 'an Indian having as much ability as a white man'.

My present awareness of the whole history of the relationship between this country's early colonizers and their descendents, and the original inhabitants of this land makes me sick and sad. I am sad at the hatred and fear that peoples have shown of each other. I am sad at the waste and destruction of human lives and the murdering of cultures that have much to offer us - whose beauty can help us to understand the spirit of a peoples that have survived for centuries in a harsh and difficult

The following statement by one member of the group, outlining

how she personally became involved in understanding the injustices to
Canadian Native-White relationships illustrates in depth our feeling
for the issues.

"I find it a bit difficult to find the right words to express what was
a very strong emotional experience, but the change in my perception
towards the Native peoples of this country came about through my
response to a carving of the Haida creation myth by the Haida artist
Bill Reid. My reaction was a spiritual experience which, over the
last two years has drastically changed my opinion of our dominant
white society and our Government's relationship with the Native peoples.

Up to the time of this involvement, I believed myself to have the
proper right liberal attitude towards the problem of discrimination.
I believed I was prejudiced towards no race or nationality, but from
my involvement with the art of the Haida peoples of British Columbia
I realized how ignorant I was about these people and the history
peoples of Canada in general. I was ashamed of this and realized
that my indifference and ignorance had been as ugly as the apparent
and open racism shown by some of the visitors to Bill Reid's 25th year
retrospective exhibition at the Vancouver Art Gallery in November 1974.
I overheard a few of these visitors comment to the effect that they
were surprised at seeing 'an Indian having as much ability as a white
man'.

My present awareness of the whole history of the relationship between
this country's early colonists and their descendants, and the original
inhabitants of this land makes me sick ... and sad. I am sad at the
hated and fear that people have shown of each other. I am sad at the
waste and destruction of human lives and the murdering of cultures that
have much to offer us - whose beauty can help us to understand the spirit
of a peoples that have survived for centuries in a harsh and difficult

"world. The people in the N.W.T. still have that spirit, and have shown it to us in the Dene Declaration. I believe that, as the original inhabitants of this land, it is more than a statement of their right to self-determination. It is their survival as a people, as a unique cultural entity that is such a lesson to the people here in the south. I know that later in the brief we will speak about the economics, the legalities, the technicalities, all the intellectual and abstract factors surrounding the settlement of this question. But I would just like to dwell a bit on the culture, the art, the music - all that shows us the spirit of a people who have loved this land for a time far beyond a mere 300 years of colonization. This spirit has to survive, and it only can survive if the Native people have their own 'nations' within the Dominion of Canada. This declaration is for all the native peoples of Canada, for their continuance, for their identity."

Thus we value the Native culture and we would like to see a society in Canada in which the contribution of minority groups can continue to enrich our society so that we may develop a way of living that builds on the strength of many cultures. This will not happen if groups are permanently disrupted or destroyed by large-scale developments. Therefore, we feel, that in a democratic country the people most directly affected by large-scale development projects should have a say in how and when these proceed.

In order to enable this process to operate in the Mackenzie Valley, we believe that the Dene must own the land over which they have aboriginal title. This is essential since ownership will give the occupants of the land, who have learned over centuries to live in

"world. The people in the N.W.T. still have that spirit, and have shown it to us in the Dease Declaration. I believe that, as the original inhabitants of this land, it is more than a statement of their right to self-determination. It is their survival as a people, as a unique culture, unity that is such a lesson to the people here in the south. I know that later in the brief we will speak about the economic, the political, the social, all the intellectual and abstract factors surrounding the settlement of this question. But I would just like to dwell a bit on the culture, the art, the music - all that shows us the spirit of a people who have lived this land for a time far beyond a mere 300 years of colonization. This spirit has to survive, and it only can survive if the Native people have their own 'nations' within the Dominion of Canada. This declaration is for all the native peoples of Canada, for their continuance, for their identity."

Thus we value the Native culture and we would like to see a society in Canada in which the contribution of minority groups can continue to enrich our society so that we may develop a way of living that builds on the strength of many cultures. This will not happen if groups are permanently disrupted or destroyed by large-scale development. Therefore, we feel, that in a democratic country the people most directly affected by large-scale development projects should have a say in how and when these proceed.

In order to enable this process to operate in the Mackenzie Valley, we believe that the Dease must own the land over which they have aboriginal title. This is essential since ownership will give the occupants of the land, who have learned over centuries to live in

ecological balance with the land, some bargaining power over the type and speed of development of non-renewable resources. This will necessitate the further development of the political system in the north so that, as well as owning the land, the Native people will have effective control of decisions affecting it. This, we feel, would be an important development since we find the present kind of colonial relationship which the Federal Government has with the Canadian North is detrimental to the development of Canada as a twentieth century democracy. The land claim, if settled justly, will give the Dene more control over areas essential to their survival such as the resource base, political processes, and educational institutions.

Increasing the Dene's ability to control their own future, through a settlement which gives them ownership of the land, will enable them to search for and develop new patterns of economic activity. They will be able to protect those who wish to live permanently off the land. For those who wish to integrate the wage economy with hunting and trapping they can experiment with new types of economic activity which incorporate the two. They can work on ways of developing renewable resources, i.e. lumber, animals, etc. to provide a means of permanent employment. We are aware of the social destruction and dislocation of boom and bust economic activities and the fragility of the ecosystem in the North and feel that the Dene with their own understanding of the land and the people are in a position to be able to help control these problems.

ecological balance with the land, some harvesting power over the type and speed of development of non-renewable resources. This will necessitate the further development of the political system in the north so that, as well as owning the land, the native people will have effective control of decisions affecting it. This, we feel, would be an important development since we find the present kind of colonial relationship with the federal government has with the Canadian north is detrimental to the development of Canada as a democratic country. The land claim, if settled justly, will give the land some control over areas essential to their survival such as the resource base, political, economic, and educational institutions.

Increasing the land's ability to control their own future, through a settlement which gives them ownership of the land, will enable them to search for and develop new patterns of economic activity. They will be able to protect those who wish to live permanently off the land, for those who wish to integrate the wage economy with hunting and trapping they can experiment with new types of economic activity which incorporate the two. They can work on ways of developing renewable resources, i.e. timber, animals, etc. to provide a means of permanent employment. We are aware of the social destruction and displacement of those and past economic activities and the fragility of the economy in the north and feel that the people with their own understanding of the land and the people are in a position to be able to help control these problems.

One of the main counter arguments to this position which we hear in the south is that if Native people have more control of the resources in the North it will mean less development and a lower standard of living in the south. We are told that we will run out of energy and we may have to live in colder houses with less light. We do not accept this as a necessary alternative. There are many possible options to consider but the Canadian people must take time to explore them. Therefore, we recommend a moratorium on large scale development activities in the North including a gas pipeline along the Mackenzie Valley for ten to fifteen years.

We feel that a moratorium would have some other advantages. It would allow time to study the possibility of no pipeline in the Mackenzie Valley at all. What other energy transportation technology might develop in the next ten years? Should the government be looking at the exploitation of resources in the whole of the North as a single rational planning unit? We understand that increasingly there are reserve finds in the high Arctic. Might the country embark on a costly pipeline down the Mackenzie only to discover that it has to repeat the exercise down the west coast of Hudson Bay to bring gas and oil from the high Arctic to the south? A moratorium would give us time to gain better knowledge of northern resources with which to plan more soundly for the future.

A moratorium would allow time to study the impact of northern development on Canada, north and south, and especially the environ-

One of the main counter arguments to this position which we hear in the south is that if Native people have more control of the resources in the north it will mean less development and a lower standard of living in the south. We are told that we will run out of energy and we may have to live in colder houses with less light. We do not accept this as a necessary alternative. There are many possible options to consider but the Canadian people must take time to explore them. Therefore, we recommend a moratorium on large scale development activities in the north including a gas pipeline along the Mackenzie Valley for ten to fifteen years.

We feel that a moratorium would have some other advantages. It would allow time to study the possibility of no pipeline in the Mackenzie Valley at all. What other energy transportation technology might develop in the next ten years? Should the government be looking at the exploitation of resources in the whole of the north as a single rational planning unit? We understand that increasingly there are reserve finds in the high Arctic. Might the country embark on a costly pipeline down the Mackenzie only to discover that it has to repeat the exercise down the west coast of Hudson Bay to bring gas and oil from the high Arctic to the south? A moratorium would give us time to gain better knowledge of northern resources with which to plan more soundly for the future.

A moratorium would allow time to study the impact of northern development on Canada, north and south, and especially the environ-

mental impacts of large scale activities. Our feeling is that not enough is known to risk the future of our northlands at this time.

Although the masses of technical data about the northern pipelines are just too complex to be completely understood by the layman, there can be no doubt that sufficient environmental safeguards simply do not exist. For all the assuring words spoken by the oil companies, there is no guarantee that large sections of the physical environment will be not irreparably damaged, both at the well-heads and along the pipeline route.

Prime Minister Trudeau, in a speech made in 1970, recognized the permanent damage which would be done by an oil spill:

"Oil would spread immediately beneath ice many feet thick; it would congeal and block the breathing holes of ... mammals...; it would destroy effectively the primary source of food for Eskimos and carnivorous wildlife throughout the area of thousands of square miles; it would foul and destroy the only known nesting areas of several species of wild birds. Because of the minute rate of hydrocarbon decomposition in frigid areas, the presence of any such oil must be regarded as permanent." ¹

The hostile environment of the North makes it one of the most hazardous areas in the world for drilling and, should a blowout occur, this same environment will cause extreme difficulty in capping the blowout and drilling relief wells. ²

mental impacts of large scale activities. Our feeling is that not enough is known to risk the future of our northlands at this time.

Although the masses of technical data about the northern

pipelines are just too complex to be completely understood by the layman, there can be no doubt that sufficient environmental safeguards simply do not exist. For all the assuring words spoken by the oil companies, there is no guarantee that large sections of the physical environment will be not irreparably damaged, both at the well-heads and along the pipeline route.

Prime Minister Trudeau, in a speech made in 1970, recognized

the permanent damage which would be done by an oil spill:

"Oil would spread immediately beneath ice many feet thick; it would condense and block the breathing holes of ... animals... it would destroy effectively the primary source of food for Eskimos and caribou; wildlife throughout the area of thousands of square miles; it would foul and destroy the only known nesting areas of several species of wild birds. Because of the minute rate of hydrocarbon decomposition in frigid areas, the presence of any such oil must be regarded as permanent."

The hostile environment of the North makes it one of the most hazardous areas in the world for drilling and, should a blowout occur, this same environment will cause extreme difficulty in capping the blowout and drilling relief wells.

Even if wellhead risks were eliminated, the potential dangers of the pipeline itself still exist. CAGPL, for example, having decided against an elevated pipeline, has not yet resolved the problems presented by a buried pipeline. In order to prevent damage to the permafrost through which a buried pipeline would pass, it was proposed that the gas be chilled to below 0 degrees C. This, however, produces a temperature change in the surface soil; this change freezes the soil moisture and this in turn causes the soil to expand and heave and, along with the soil, the pipeline. The danger is self-evident and yet no design modifications to the buried chilled mode have been made.³ In addition, the testing done by CAGPL on buried pipelines is incomplete:

"The largest test facility, at Sans Sault ... (has soil) representative of only a tiny portion of the types that will be traversed in the route. Therefore, they could not test the problem of differential heave, the most difficult heave to predict, which occurs at the interface of different soils; such soil type transitions are common in the field".⁴

These examples, and they are but a few of the many, clearly indicate that insufficient environmental investigation has been done to justify large scale development in the North, including the construction of a pipeline through the Mackenzie Valley.

We recognize that a moratorium might initially force us as southern Canadians into a lower material standard of living. We do not see this as negative but as positive and necessary if we are to search

Even if wellhead risks were eliminated, the potential danger of the pipeline itself still exists. CAGBL, for example, having decided against an elevated pipeline, has not yet resolved the problems presented by a buried pipeline. In order to prevent damage to the permafrost through which a buried pipeline would pass, it was proposed that the gas be chilled to below 0 degrees C. This, however, produces a temperature change in the surface soil; this change freezes the soil moisture and this in turn causes the soil to expand and heave and, along with the soil, the pipeline. The danger is self-evident and yet no design modifications to the buried chilled mode have been made.³ In addition, the testing done by CAGBL on buried pipelines is incomplete:

"The largest test facility, at Sand Sault ... (has soil) representative of only a tiny portion of the types that will be traversed in the route. Therefore, they could not test the problem of differential heave, the most difficult heave to predict, which occurs at the interface of different soils; such soil type transitions are common in the field."⁴

These examples, and they are but a few of the many, clearly indicate that insufficient environmental investigation has been done to justify large scale development in the North, including the construction of a pipeline through the Mackenzie Valley.

We recognize that a moratorium might initially force us to southern Canadians into a lower material standard of living. We do not see this as negative but as positive and necessary if we are to search

for alternatives to our current living patterns that will enable us to respond creatively to our position in a world of finite resources and extremes of wealth and poverty. Thus, we would favour a variety of activities related to looking for alternatives.

If we are to reduce our present dependence upon fossil fuels, a start must be made immediately on developing alternative energy sources on a large scale. A great many possible alternatives have been investigated in recent years which we feel should now be pursued further. For example:

- (1) Wind and Solar Power; should be developed on a wide scale as an energy supplement for electricity generating systems which are currently burning oil.
- (2) Synthetic Oil; manufactured from industrial wastes should be produced and marketed to the point where it reduces the demand for natural oil.
- (3) Solar Fuel Cells; such as those used in the space industry should be modified to enable their widespread use in buildings at a reasonable cost.
- (4) Pyrolysis; a recently developed process which converts the plastic content of garbage into fuel, has now been used in Vancouver, Detroit, and Los Angeles, but should now be developed on an even wider scale.⁵

Government policy, however, must change if alternative energy sources are to be developed. Costs for further research into and development of the suggested alternatives are still high and it is necessary to provide financial assistance for large scale development of these new

for alternatives to our current living patterns that will enable us to respond creatively to our position in a world of finite resources and extremes of wealth and poverty. Thus, we would favour a variety of activities related to looking for alternatives.

It we are to reduce our present dependence upon fossil fuels, a start must be made immediately on developing alternative energy sources on a large scale. A great many possible alternatives have been investigated in recent years which we feel should now be pursued further. For example:

- (1) Wind and Solar Power; should be developed on a wide scale as an energy supplement for electricity generating systems which are currently burning oil.
- (2) Synthetic Oil; manufactured from industrial wastes should be produced and marketed to the point where it reduces the demand for natural oil.
- (3) Solar Fuel Cells; such as those used in the space industry should be modified to enable their widespread use in buildings at a reasonable cost.
- (4) Pyrolysis; a recently developed process which converts the plastic content of garbage into fuel, has now been used in Vancouver, Detroit, and Los Angeles, but should now be developed on an even wider scale.

Government policy, however, must change if alternative energy sources are to be developed. Costs for further research into and development of the suggested alternatives are still high and it is necessary to provide financial assistance for large scale development of these new

sources, whether that assistance be in the form of tax incentives, grants, or other economic policies. Government must not procrastinate. We cannot afford to wait for a true energy crisis to strike before we start thinking about new energy sources. The proposed ten year moratorium on northern development would provide sufficient time for research and at least initial development of alternatives. Funding now being invested in nuclear power might be far better spent on the alternatives suggested above. Proper safeguards in this field do not exist, and from all available evidence, never will exist.⁶

Government policy must also change in a second way. The psychology of consumption and unlimited growth, on which our society functions, leads inevitably to a state of energy shortage. This mentality must be replaced by a psychology of restraint if we expect to continue inhabiting this planet. World-wide research suggests that restraints are essential if global resource shortages are to be resolved without massive social upheavals.⁷ It is the government's responsibility to help promote a new ethic of conservation. Massive disruption of the North in order to provide fuel for the south is hardly the way to encourage restraint and conservation.

All of this is to ask for a radical change in values; it is ultimately a plea for a simpler, more spiritually oriented life. It would be simplistic to say that people of past eras or other, less industrialized cultures such as in the North, have been or are supremely happy for not having the use and comfort of massive energy resources. But there can be

sources, whether that assistance be in the form of tax incentives, grants, or other economic policies. Government must not procrastinate. We cannot afford to wait for a true energy crisis to strike before we start looking about new energy sources. The proposed ten year moratorium on nuclear development would provide sufficient time for research and at least limited development of alternatives. Funding now being invested in nuclear power might be far better spent on the alternatives suggested above. Proper safeguards in this field do not exist, and from all available evidence, never will exist.²

Government policy must also change in a second way. The psychology of competition and unlimited growth, on which our society functions, leads inevitably to a state of energy shortage. This mentality must be replaced by a psychology of restraint if we expect to continue inhabiting this planet. World-wide research suggests that restraints are essential. If global resource shortages are to be resolved without massive social upheavals,³ it is the government's responsibility to help promote a new ethic of conservation. Massive disruption of the North in order to provide fuel for the South is hardly the way to encourage restraint and conservation.

All of this is to set for a radical change in values; it is ultimately a plea for a simpler, more spiritually oriented life. It would be simplistic to say that people of past eras or other, less industrialized cultures such as in the North, have been or are supposedly happy for not having the use and comfort of massive energy resources. But there can be

little doubt that the complications of modern Canadian society are not conducive to mental and spiritual well-being. If decreasing dependence upon fossil fuels and an official policy of constraint lead to a lower material standard of living and eventually to a simpler life, it would perhaps be the best thing that could happen to this country. To continue at our present rate of production and consumption could be disastrous.

A moratorium on development in the north will allow time for Canadians to carefully assess their current life styles and begin looking seriously for alternative energy sources. It will also allow time for us to work towards a just land settlement. A just settlement would free the people of the Northwest Territories from excessive external control in many areas of their life. Education is one such area which urgently requires changes to be carried out under the control of the Native people.

For example, a truly educational curriculum would link programmes closely to the training and culture of the child. The successful implementation of such programmes requires teachers who have knowledge of the background heritage of their students. This continues to be a difficult goal to achieve in the N.W.T. where on the average, over a six-year period (1969-1974), employment of Inuit, Indian and Metis teachers only represented about one per cent of the total teaching force.⁸ With so few Native teachers it is not surprising that students find the school environment alien; difficult and irrelevant and drop out of school early. The educational statistics of 1974 showed that 94% of status Indians across Canada dropped out before

little doubt that the complications of modern Canadian society are not conducive to mental and spiritual well-being. It is decreasing dependence upon fossil fuels and an official policy of constant lead in a lower material standard of living and eventually to a starker life. It would perhaps be the best thing that could happen in this country. To continue at our present rate of production and consumption could be disastrous.

A moratorium on development in the north will allow time for Canadians to carefully assess their current life styles and begin looking seriously for alternative energy sources. It will also allow time for us to work towards a just land settlement. A just settlement would free the people of the Northwest Territories from excessive external control in many areas of their life. Education is one such area which presently requires changes to be carried out under the control of the Native people.

For example, a truly educational curriculum would link programmes closely to the training and culture of the child. The successful implementation of such programmes requires teachers who have knowledge of the background heritage of their students. This continues to be a difficult goal to achieve in the N.W.T. where on the average, over a six-year period (1982-1974), employment of Inuit, Indian and Métis teachers only represented about one per cent of the total teaching force.⁸ With so few Native teachers it is not surprising that students find the school environment alien, difficult and irrelevant and drop out of school early. The educational statistics of 1974 showed that 84% of status Indians across Canada dropped out before

finishing high school compared to 12% of white students. It was also found that less than 40% of Native students finished grade eight. These national statistics on status Indians across Canada are probably representative of Native students in the N.W.T. and indicate that the curriculum programmes and the methods of selecting and training teachers continue to be unsuccessful in providing such students with an appropriate education.

The Native people of the North West Territories want more control over how their children are educated and what this education leads to. The recent revision of the School Ordinance was a perfect opportunity for the Government of the N.W.T. to fully involve the people of the North. However, before it was first re-written there was little, if any, communication with Native people in their own languages. Indian, Metis, and Inuit Associations in their reports on the Ordinance have shown that vital areas such as administration, languages of instruction, and cultural beliefs are still not included in a way which reflects the needs of the Native people.⁹ White dominated Territorial and Federal Governments are not in a position to successfully solve Native educational problems. Therefore, the Native people of the N.W.T. must be given legal control over their own educational system.

As well as native control over their own education, there is a need for reform within the educational systems of Canada which would reflect more awareness and understanding of Native people, their past and their present. Curriculum should be reviewed and rewritten in consultation with

finishing high school compared to 12% of white students. It was also found that less than 40% of Native students finished grade eight. These national statistics on status Indians across Canada are probably representative of Native students in the N.W.T. and indicate that the curriculum programs and the methods of selecting and training teachers continue to be unsuccessful in providing such students with an appropriate education.

The Native people of the North West Territories want more control over how their children are educated and what this education leads to. The recent revision of the School Ordinance was a perfect opportunity for the Government of the N.W.T. to fully involve the people of the North. However, before it was first re-written there was little, if any, consultation with Native people in their own languages. Indian, Métis, and Inuit Associations in their reports on the Ordinance have shown that vital areas such as administration, language of instruction, and cultural beliefs are still not included in a way which reflects the needs of the Native people. White dominated Territorial and Federal Governments are not in a position to successfully solve Native educational problems. Therefore, the Native people of the N.W.T. must be given legal control over their own educational system.

As well as native control over their own education, there is a need for reform within the educational systems of Canada which would reflect more awareness and understanding of Native people, their past and their present. Curriculum should be reviewed and rewritten in consultation with

Native people to ensure proper study of Canada's first peoples, to eliminate the propagation of stereotype images, and to prevent the development of negative attitudes toward Native peoples. School boards also should conduct teachers' workshops on Native peoples. If we Southerners had a deeper understanding of the injustices suffered by Native people within Canadian society, the probability of achieving a just solution for the people of the Mackenzie Valley, and a just solution for all native peoples, would be greater.

In conclusion we support the Native position that the land claims should be settled prior to the development of a gas pipeline in the Mackenzie Valley and that there should be a moratorium on major development projects in the North for 10 to 15 years in order to allow for further study. We support this position because we feel that it is in the best interest of the people in the south and of the future development of Canada. We know that the Native people have ably presented their position themselves. What we are trying to say, is that from our point of view, we strongly support the Native position because we feel in the long run it will be in the best interest of all Canadians.

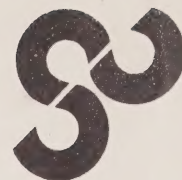
Ottawa, Ontario
June 3, 1976

Native people to ensure proper study of Canada's first peoples, to eliminate the propagation of stereotypical images, and to prevent the development of negative attitudes toward Native peoples. School boards also should conduct teachers' workshops on Native peoples. If we do nothing, we are helping understand of the injustices suffered by Native people within Canadian society, the probability of achieving a just solution for the people of the Northwest Valley, and a just solution for all native peoples, would be greater.

In conclusion we support the Native position that the land claim should be settled prior to the development of a gas pipeline in the Northwest Valley and that there should be a moratorium on major development projects in the North for 10 to 15 years in order to allow for further study. We support this position because we feel that it is in the best interest of the people in the south and of the future development of Canada. We know that the Native people have justly presented their position themselves. What we are trying to say, is that from our point of view, we strongly support the Native position because we feel in the long run it will be in the best interest of all Canadians.

Ottawa, Ontario
June 3, 1978

1. Canadian Artic Resources Committee, Northern Perspectives, Vol. 2, No. 4, p.2
2. The length of time to drill a relief well could be anywhere from three months to one year, Northern Perspectives, Vol. 2, No. 2, p.1
3. Northern Perspectives, Vol. 3, No. 4, pp. 5f
4. Northern Perspectives, Vol. 3, No. 4, p.6
5. R.G. Schwieger, "Some Processes Can Produce Fuels from Municipal Refuse", Power New York, 1975, Vol. 119, No. 2, p.24
6. W. Rowland, Fuelling Canada's Future, Toronto, Macmillan, 1974
7. D.L. Meadows et al, The Limits to Growth, M.I.T., Club of Rome, 1972
A. Herrarra, et al, Catastrophe or New Society, an Alternate World Model, Ottawa, I.D.R.C. 064e, 1976.
8. National Indian Brotherhood, Education Files
9. Metis Association of the N.W.T., Indian Brotherhood of the N.W.T., Tripartite Committee Report on Ordinance Respecting Education in the N.W.T., Yellowknife, 1976.



NOTES FOR A BRIEF TO THE MACKENZIE VALLEY PIPELINE INQUIRY

Presented by

Dr. William Gauvin,
chairman of the

Committee on Northern Development
Science Council of Canada

June 4, 1976



NOTES FOR A BRIEF TO THE MACKENZIE VALLEY PIPELINE INQUIRY

Presented by

Dr. William G. Davis,
Chairman of the

Committee on Northern Development
Science Council of Canada

June 4, 1976

Brief to MacKenzie Valley Pipeline Inquiry
presented by Dr. William Gauvin, Chairman,
Science Council Committee on Northern
Development.

Mr. Berger. The purpose of our brief statement is to acquaint you with some of the activities of the Science Council Committee on Northern Development; as well as to make some observations which may be of use to you in writing your report. We have been engaged for some time in trying to understand what northern development is and how decisions are made which affect northern development. This will enable us to better discharge our obligation to the people of Canada, to recommend ways in which science and technology can be best used for the development of the north. We think that an inquiry of the kind you are presently conducting is vitally important. We see it as enhancing the chances for the most intelligent use of our scientific and technological knowledge in the north. We commend you for the open and balanced procedures which you have employed, and think means must be found to continue the process you have started.

For the record, the Science Council of Canada is a small (\$2 million annually) independent crown corporation whose mandate is to assess Canada's scientific and technological resources, requirements, and potentialities. Although we report through the Minister of State for Science and Technology, we have a mandate which affords a wide degree of latitude, and we operate increasingly in a national and a public mode.

Mr. Berger. The purpose of our brief statement is

to acquaint you with some of the activities of the Science
Council Committee on Northern Development; as well as to make

some observations which may be of use to you in writing your

report. We have been engaged for some time in trying to under-

stand what northern development is and how decisions are made

which affect northern development. This will enable us to better

discharge our obligation to the people of Canada, to recommend

ways in which science and technology can be best used for the

development of the north. We think that an inquiry of the kind

you are presently conducting is vitally important. We see it as

enhancing the chances for the most intelligent use of our

scientific and technological knowledge in the north. We commend

you for the open and balanced procedures which you have employed,

and think much must be found to continue the process you have

started.

For the record, the Science Council of Canada is a small

(\$5 million annually) independent crown corporation whose mandate

is to assess Canada's scientific and technological resources,

requirements, and potentialities. Although we report through

the Minister of State for Science and Technology, we have a

mandate which affords a wide degree of latitude, and we operate

increasingly in a national and a public mode.

We have published reports and background studies in many areas: energy, technology transfer from government laboratories, and health care delivery are some of our relatively recent reports.

We also publish background studies which are signed by the authors who were commissioned to do the background work. Of interest to this inquiry are the following:

Background Study No.17, A Survey of Canadian Activity in Transportation R & D, by C.B. Lewis

Background Study No.22, The Multinational Firm, Foreign Direct Investment, and Canadian Science Policy, by Arthur J. Cordell

Background Study No.27, Essays on Aspects of Resource Policy, by W.D. Bennett, A.D. Chambers, A.R. Thompson, H.R. Eddy, and A.J. Cordell

Background Study No.30, A Technology Assessment System: A Case Study of East Coast Offshore Petroleum Exploration, by M. Gibbons and R. Voyer

Most recently we have published two background studies related to our own northern development study: no.36, The Political Economy of Northern Development and no.34, A case study of the Technology Assessment System in the MacKenzie Delta Beaufort Sea area. I have copies of these reports which I can give you. I

We have published reports and background studies in many areas: energy, technology transfer from government laboratories, and health care delivery are some of our relatively recent reports. We also published background studies which are cited by the authors who were commissioned to do the background work. Of interest in this inquiry are the following:

Background Study No. 17, A Survey of Canadian Activity in Transportation R & D, by C.R. Lewis

Background Study No. 22, The Multinational Firm, Foreign Direct Investment, and Canadian Science Policy, by Arthur L. Corbett

Background Study No. 17, Essays on Aspects of Resource Policy, by W.D. Bennett, A.D. Chambers, and J. Thompson
R.R. Eddy, and A.L. Corbett

Background Study No. 20, A Technology Assessment System: A Case Study of East Coast Oilshore Petroleum Exploration, by M. Gibbon and R. Joyce

Most recently we have published two background studies related to our own northern development study: no. 23, The Political Economy of Northern Development and no. 24, A case study of the Technology Assessment System in the Mackenzie Delta region. See also. I have copies of these reports which I can give you.

also have an internal staff paper which excerpts previous Science Council recommendations on northern development. These may also be of interest.

The Science Council Study on Northern Development initially combined the Council's interest in northern resource development and the interest of two staff members in the notion of technology assessment. This had the happy consequence of leading us to take a novel approach with respect to scientific and technological requirements for the north -- an approach which emphasizes the context in which decisions are made. That is to say, we took a rather broad view of what a good technology assessment system ought to comprise. As Dr. Voyer and Dr. Gibbons wrote in their Case Study of East Coast Off-Shore Petroleum Exploration, "a technology assessment system comprises those social groups which are (or should be) concerned with developing a given technological program." (p.34) That is to say, we are interested in broadening participation in the assessment of technological programs to parties not normally involved into the process. In the case of East Coast off-shore oil, this included the fishing, mining, forestry, and agriculture industries, as well as organized labour.

We decided to continue this approach for the study on Northern Development. We therefore commissioned a number of case studies, on various proposed or actual projects, including the MacKenzie Valley Pipeline.

"The authors were asked to identify the parties involved, to determine the inter-play between these parties or "actors", to describe the information bases available to different actors, and to report on the timing of each project and the

also have an interest in the study which exceeds previous
Science Council's recommendations on northern development.
There may also be of interest.

The Science Council Study on Northern Development
initially considered the Council's interest in northern resource
development and the interest of two staff members in the analysis
of technology assessment. This had the happy consequence of
leading us to take a novel approach with respect to select the
and technological requirements for the north -- an approach
which emphasized the context in which decisions are made.
That is to say, we took a rather broad view of what a good
technology assessment system ought to comprise. As Dr. Verne
and Dr. Gibson wrote in their Case Study of the Mackenzie
Shore Petroleum Exploration, "A technology assessment system
comprises those social groups which are (or should be) concerned
with developing a given technological project" (p. 24). That is
to say, we are interested in broadening participation in the
assessment of technological projects to parties not normally
involved into the process. In the case of the Mackenzie
oil, this included the fishing, mining, forestry, and agricultural
industries, as well as organized labour.

We decided to continue this approach for the study
on Northern Development. We therefore commissioned a number
of case studies, on various proposed or actual projects, including
the Mackenzie Valley Pipeline.
The authors were asked to identify the parties
involved, to determine the inter-play between these parties or
"actors", to describe the information bases available to different
actors, and to report on the timing of each project and the

possible alternatives. It was hoped that such an approach would lead to the identification of possible "blind spots" in the information base, of institutional problems, and of the requirements for common services (e.g. transportation, communications, health care). The following policy questions could be raised:

- (a) Are all interested parties represented in the decision-making process? What are the relative weights of the actors? ✓
- (b) Is the information base adequate for decision-making? If not, what new programs must be started in the very near future?
- (c) Is the present technology adequate? If not, what new technology is required? Should Canadians enter these new technological areas?
- (d) Should an industrial infrastructure be developed at certain sites in the North? If so, how should this be brought about?
- (e) How will Northerners participate? ✓
- (f) What are the manpower requirements? What training programs are required? ✓
- (g) How much government participation is required to support northern development projects? At what cost?
- (h) Are there any jurisdictional problems? Are new institutional arrangements needed?
- (i) What R & D priorities emerge in view of the timing of the various projects?
- (j) Do alternative strategies exist to reach stated goals? If so, are they being adequately considered?"

As you can see, we were interested in some of the same questions, which you have been dealing with.

The Issues raised by the case studies are summarized in the Discussion Paper on Northern Development which we have written. (present copy) This paper deals briefly with a number of issues, but I would like to emphasize two of them here because they relate so directly to the Inquiry you are conducting.

First of all, our case studies indicate that a rapid pace of development tends to leave peripheral actors (e.g. native and local residents) out of the decision-making system. It means also that assessments of social and environmental impacts tend to come after, rather than to precede decisions to proceed with projects. This was the case with both James Bay and the Syncrude project for example. The MacKenzie Valley Pipeline, at least, has the possibility that social, and environmental considerations may bear some weight in the go-no-go decision. I say, possibility, because I am well aware that your terms of reference have nothing to do with recommending a go or no-go decision. We feel that your inquiry has been somewhat hampered by this limitation and even more hampered by its limitation to what is effectively a single proposal for a gas pipeline. A more comprehensive technology assessment would have involved a more open consideration of alternative transportation technologies.

Our case studies all emphasized that the question of balance between the various participants in project proposals (including those likely to be affected directly by the proposal) was an extremely important issue. The authors of our case-study on the MacKenzie Delta observed that "The system seems disproportionately weighted in favour of federal government and industry participation."

While this may frequently be the case, we are at least encouraged by the very positive steps you have taken in your inquiry to attempt to ensure that there is some reasonable semblance of balance between the various groups interest in the proposal.

It is for this reason that we commend your decisions to fund intervenor groups as well as your decision to allow them a reasonable amount of time to prepare their case. We are impressed also by the community hearings you have held. We believe that consensus is very important to the proper functioning of a democracy and that your inquiry is a superb method of determining for the politicians what is likely to be acceptable to northerners.

Another issue which emerged from our case studies concerned information. Society needs accurate information to function properly. Information has, in fact, become so valuable, that it is now literally a medium of exchange. It is no wonder that those with economic or political stakes in the outcome feel their interests threatened by proposals for more open sharing of information. In our Discussion Paper we report our concern with this frustrating tendency. We are therefore pleased that your inquiry has been able to bring a great deal of information into a more accessible forum. However, the problem persists.

We also expressed concern in our Discussion Paper about the uses and view taken of information. Basically the problem is that everyone collects and interprets information from his own perspective -- or from the perspective of his employers. The problem has no doubt surfaced in each phase

of your inquiry. Information has no doubt been presented selectively to you so as to best support the case of an applicant or an intervenor.

The question might be asked, is this an appropriate way to pursue objective scientific truth? The question of frost heave, for instance still seems unsettled, despite many hours of testimony. The answer is that science often does not have definitive answers to difficult and complex environmental and social questions, no matter how learned the expert scientist may be. This obviously has been brought out in your Inquiry.

It would be simpler if the scientific evidence on a given subject were always clear, but the fact is that scientists often are asked to predict the actions of very complex systems on very limited data. They do so by using their judgement and intuition as well as their scientific knowledge and skills, and it is no wonder that there are differences of opinion. The problem is most serious when it comes to assessing the risk or probability of an undesirable event. Even if scientists agree that the likelihood of an event is only 1 in 1000, they are not necessarily likely to agree that the probability of the event is too high to take the risk, or is low enough to proceed as planned.

We can only suggest to you that if risks are taken, that at least they be taken consciously and with full knowledge of the consequences if they should occur. As a general principle, we feel that it is not fair to expect one party to take the risks and another to take the consequences, if at the same time benefits are apportioned in a different manner. The native people have

of your policy. Information has not been presented

selectively to you so as to best support the case of an

applicant as an informant.

The question might be asked, is this an appropriate

way to pursue objective scientific truth? The question is

that have, but instance still seems asserted, despite many

hours of testimony. The answer is that science often does not

have definitive answers to difficult and complex environmental

and social questions, as neither has it the ability to predict

any one. This obviously has been brought out by your inquiry.

It would be a mistake to the scientific evidence as a

given object were always that, but the fact is that scientists

often are asked to predict the actions of a complex system

on very limited data. They do so by using their judgment and

experience as well as their scientific knowledge and skill, and

it is no wonder that there are differences of opinion. The problem

is not serious when it comes to assessing the risk or probability

of an undesirable event. Even if scientists agree that the

likelihood of an event is only 1 in 100,000, that is not necessarily

likely to agree that the probability of the event is the same as

take the risk, or is low enough to proceed as planned.

We can only suggest to you that if this is taken, that

at least they be taken consistently and with full knowledge of the

consequences if they should occur. As a general principle, we

feel that it is not fair to expect one party to take the risk and

another to take the consequences, if at the same time benefits

are apportioned in a different manner. The native people have

legitimate reason to be concerned. In the past they have suffered more than they have benefitted from developments. Risks should not fall on them any more heavily than the potential benefits which they might ultimately achieve, unless these are clear, acceptable, and adequate guarantees of compensation for damage which may occur.

In conclusion; the Science Council Committee on Northern Development has in some of its work to date argued that there is a need for open and balanced technology assessment systems. We feel that on the whole your Inquiry has come closer than anything else we are familiar with to fulfilling our notion of ideal assessment. However, to be fair, we think your terms of reference have inhibited you from going as far as might ideally have been desirable. Technology assessments should also consider alternative technologies, for example. However by explicitly relating your inquiry to the corridor principle, we think you have at least avoided the trap of treating the MacKenzie Valley Pipeline proposal as an isolated project.

Just as some environmental interference is reversible only in the very long run, and perhaps not even then, the same is true for social and cultural interference. The principle holds for inquiries as well! You have helped to catalyze a number of emerging trends not in the North, but also in the field of technology assessment. It would be foolish to argue that we can ignore what we have learned or the way in which it has been learned. Therefore we strongly urge you in your report to

legitimate reason to be concerned. In the past they have
suffered more than they have benefited from development.

But should not fall on them any more heavily than the
potential benefits which they might otherwise achieve.

There are three, acceptable, and adequate guarantees of responsibility
for damage which may occur.

In conclusion, the Science Council Committee on

Western Development has in some of its work to date argued that
there is a need for open and balanced technology assessment systems.

We find that on the whole your inquiry has been closer to

something else we are familiar with in fulfilling our duties as

about assessment. However, in the past, we have been taken of

influence have inhibited you from doing as far as might ideally

have been desirable. Technology assessments should also consider

information technologies, for example. However by explicitly

listing your inquiry in the central programme, we think you

have at least avoided the trap of treating the Western World

as an isolated project.

Just as some environmental interference is inevitable

only in the very long run, and perhaps not even then, the same is

true for social and cultural interference. The principle holds

for industries as well. You have helped to catalyse a number of

emerging trends not in the North, but also in the South of

technology assessment. It would be foolish to argue that we

can ignore what we have learned or the way in which it has been

learned. Therefore we strongly urge you in your report to

recommend to the Government that irrespective of whether or not the right of way permit is granted, that means be found to ensure that similar developments in the corridor, or elsewhere, as well as any necessary monitoring for the gas pipeline, be subject to procedures which recognize certain basic principles of balanced and open technology assessments. In particular we think it will be necessary to have monitoring bodies which are not only broadly representative, but which regularly consult the people affected by pipeline activities. It will also be necessary to give them immediate powers and to avoid bureaucratic situations where responsibility can be evaded. Buck-passing is in itself a form of power and not a very attractive one.

The process you have set in motion is a healthy one and should not stop at the end of your inquiry.

However, we also intend to invite you to consider with us ways in which it might be improved for the north, and perhaps even adapted to the south.

May, 1976

recommended to the Government that irrespective of whether or not
the right of way permit is granted, that means be found to ensure
that similar developments in the corridor, or elsewhere, do not
as any necessary monitoring for the gas pipeline, be subject to
procedures which recognize certain basic principles of balance
and open technology assessments. In particular we think it will
be necessary to have monitoring bodies which are not solely directly
representative, but which regularly consult the people affected
in pipeline activities. It will also be necessary to give them
immediate powers and to avoid bureaucratic situations where
responsibility can be avoided. Such a body is to itself a
form of power and not a very different one.
The process you have set in motion is a healthy one
and should not stop at the end of your inquiry.
However, we also intend to invite you to consider
with us ways in which it might be improved for the north, and
perhaps even adapted to the south.

May 1975

EXECUTIVE SUMMARY

This brief is submitted by the Ottawa Chapter of the Solar Energy Society of Canada. The purpose of this brief is to provide information on the status of solar energy in Canada. The brief is intended to be used by the Berger Commission in its study of the impact of energy on the environment. The brief is organized into three main sections: a description of the solar energy resources in Canada, a description of the current use of solar energy in Canada, and a description of the potential for increased use of solar energy in Canada.

BRIEF SUBMITTED TO THE BERGER COMMISSION

BY THE OTTAWA CHAPTER OF THE SOLAR ENERGY SOCIETY OF CANADA

The purpose of this brief is to provide information on the status of solar energy in Canada. The brief is intended to be used by the Berger Commission in its study of the impact of energy on the environment. The brief is organized into three main sections: a description of the solar energy resources in Canada, a description of the current use of solar energy in Canada, and a description of the potential for increased use of solar energy in Canada.

The purpose of this brief is to provide information on the status of solar energy in Canada. The brief is intended to be used by the Berger Commission in its study of the impact of energy on the environment. The brief is organized into three main sections: a description of the solar energy resources in Canada, a description of the current use of solar energy in Canada, and a description of the potential for increased use of solar energy in Canada.

The purpose of this brief is to provide information on the status of solar energy in Canada. The brief is intended to be used by the Berger Commission in its study of the impact of energy on the environment. The brief is organized into three main sections: a description of the solar energy resources in Canada, a description of the current use of solar energy in Canada, and a description of the potential for increased use of solar energy in Canada.

June 3, 1976

The purpose of this brief is to provide information on the status of solar energy in Canada. The brief is intended to be used by the Berger Commission in its study of the impact of energy on the environment. The brief is organized into three main sections: a description of the solar energy resources in Canada, a description of the current use of solar energy in Canada, and a description of the potential for increased use of solar energy in Canada.

BEING SUBMITTED TO THE HOUSE OF COMMONS

BY THE ATTORNEY GENERAL OF THE UNITED KINGDOM OF GREAT BRITAIN

June 1, 1918

INTRODUCTION

This brief is submitted by the Ottawa Chapter of the Solar Energy Society of Canada. The concern of our society is the promotion of solar energy rather than the politics of northern development, or for that matter the politics of energy in Canada. However, the issue of northern development and particularly the issue of whether the Mackenzie Valley pipeline should be built, cannot be viewed in isolation. The wider issues of energy policy in Canada need to be considered.

We understand that the mandate of your Commission is limited to examining the social, economic and environmental impact of the proposed pipeline. As a local society, we are not in a position to judge collectively whether the amount of environmental damage and pollution caused by the pipeline would be acceptable, or whether the degree of social breakdown would be kept within acceptable limits.

Our position is that these decisions on what is or is not acceptable are relative and must be seen within a wider context.

In our opinion, it seems only reasonable that if the same amount of energy that can be supplied via the Mackenzie pipeline can be provided for the same uses at a comparable cost from alternative renewable sources, and these sources are without the adverse environmental and social consequences of northern development, then such alternative courses of action should be given very serious consideration.

AN ALTERNATIVE OPTION: SOLAR ENERGY AND ENERGY CONSERVATION

The course of action that we advocate is the rapid development of solar energy combined with an intensive program of energy conservation. The advantages of this two-pronged approach are that there are no problems of pollution or environmental damage; and that the social consequences are minimal, the only drawbacks being the need for the majority of Canadians to modify their lifestyle slightly: buy smaller cars, bicycle to work, use public transportation, turn the thermostat down and turn off the lights. But these modifications are insignificant compared to the radical changes in lifestyle that would be forced on the people living in the small communities in the Mackenzie Valley should the pipeline be built.

INTRODUCTION

This brief is submitted by the Ottawa Chapter of the Solar Energy Society of Canada. The concern of our society is the promotion of solar energy rather than the position of northern development, or for that matter the position of energy in Canada. However, the issue of northern development and particularly the issue of whether the Mackenzie Valley pipeline should be built, cannot be viewed in isolation. The wider issues of energy policy in Canada need to be considered.

We understand that the mandate of your Commission is limited to examining the social, economic and environmental impact of the proposed pipeline. As a local society, we are not in a position to judge collectively whether the impact of environmental damage and pollution caused by the pipeline would be acceptable, or whether the degree of social breakdown would be kept within acceptable limits.

Our position is that these decisions on what is or is not acceptable are relative and must be seen within a wider context.

In our opinion, it seems only reasonable that if the same amount of energy that can be supplied via the Mackenzie pipeline can be provided for the same time at a comparable cost from alternative renewable sources, and these sources are without the adverse environmental and social consequences of northern development, then such alternative sources of energy should be given very serious consideration.

AN ALTERNATIVE OPTION: CLEAN ENERGY AND ENERGY CONSERVATION

The course of action that we advocate is the rapid development of solar energy combined with an intensive program of energy conservation. The advantages of this two-pronged approach are that there are no problems of pollution or environmental damage; and that the social consequences are minimal. The only drawbacks being the need for the majority of Canadians to modify their lifestyle slightly: buy smaller cars, bicycle to work, use public transportation, turn the thermostat down and turn off the lights. But these modifications are insignificant compared to the radical changes in lifestyle that would be forced on the people living in the small communities in the Mackenzie Valley should the pipeline be built.

Moreover, it is inevitable, as fossil fuel resources dwindle, that we will have to modify our energy habits anyway; so why not make these changes now rather than later?

THE FEDERAL GOVERNMENT'S ENERGY STRATEGY

The Federal Government has recently published its policy for energy self-reliance.¹ The thrust of the new policy is that Canada's energy needs in the foreseeable future will rely very heavily on nuclear power and fossil fuels: oil, gas and coal. The potential of renewable energy is very much down-played. *

The Energy Strategy report is somewhat contradictory as regards the potential contribution of renewable energy. Although it is estimated that renewable energy could possibly provide between 3 and 6 per cent of Canada's primary energy demand by 1990, these figures are not included in the total estimates given in the report. The only sources of energy included in the estimates are coal, gas, oil and primary electricity. We can therefore only presume that if renewable energy can fulfill this potential, then 3 to 6 per cent less energy will be needed from these non-renewable sources. This factor could be very significant when it comes to making decisions on whether there will be a need for the natural gas of the Mackenzie Delta by 1990.

Whether these estimates of the potential for renewable energy are accurate is a matter for conjecture. In contrast to the wildly optimistic estimates of oil and gas reserves in the north, the government has spectacularly underestimated the potential of renewable energy in general and solar energy in particular. Only last year the official estimate was that solar energy could provide a mere one-hundredth of one per cent of Canada's energy needs. This year, a preliminary study has estimated the potential as between 2 and 4 per cent -- an increase that is, to say the least, significant.²

* It should be noted that in the Energy Strategy report, renewable energy is defined to include solar, tidal, geothermal and unconventional small-scale hydro, but does not include power generated by conventional hydro-electrical plants, although this is of course a form of renewable energy. Solar energy is a general term to include passive solar, direct solar, wind and biomass.

The issue of how much of Canada's total energy demands can be provided by solar energy is of course related to the issue of how much energy is needed. The Energy Strategy report estimates that even with reduced demand due to the effect of higher energy prices, the total energy demand will increase by 100 per cent before 1990 unless specific government initiatives are taken.

Although the government has initiated some small positive steps to help reduce energy demand, these measures in themselves are clearly not sufficient. Although it may be possible to limit the increase in energy demand to less than 30 per cent, it remains to be seen whether the Government and the Canadian public are indeed willing to provide the concerted action and effort required.

The issue of energy conservation has been examined in detail in other briefs submitted to this Commission and we will therefore not concern ourselves here with the many benefits of energy conservation measures. This should not be taken to mean that we are downplaying its importance in any way. Energy conservation is a means of buying time until the renewable energy option can be implemented.

A further issue raised by the Energy Strategy report is that there is no indication of how Canada's energy demands are going to be satisfied beyond the 1990's. Because of the long lead time required to develop renewable energy sources, it is critical that decisions on long-term energy strategy should influence present-day policies, decisions and investments. If renewable energy is to provide a significant proportion of Canada's energy needs by 2020, say more than 30 per cent, it is necessary that a start be made immediately. Unless today's buildings are designed so that they can make best use of passive solar radiation and can be easily retrofitted for solar space and water heating systems, it will be impossible to implement the solar energy option rapidly in the future.

The Energy Strategy report also raises, but does not answer, the issue of interfuel substitution. There is no clear cut policy on how the government foresees that low-grade energy sources such as solar energy will be substituted for high-grade sources such as fossil fuels. Moreover, there is no information on what percentage of our future energy needs will be low grade and percentage will be high grade. This information is essential in deciding whether we need the high-grade frontier fossil fuel resources by the late 1980's.

The issue of how much of Canada's total energy demands can be provided by solar energy is of course related to the issue of how much energy is needed. The Energy Strategy report estimates that even with reduced demand due to the effect of higher energy prices, the total energy demand will increase by 100 per cent before 1980 unless specific government initiatives are taken.

Although the government has initiated some small positive steps to help reduce energy demand, these measures in themselves are clearly not sufficient. Although it may be possible to limit the increase in energy demand to less than 30 per cent, it remains to be seen whether the Government and the Canadian public are indeed willing to provide the concerted action and effort required.

The issue of energy conservation has been outlined in detail in other reports submitted to this Commission and we will therefore not concern ourselves here with the many benefits of energy conservation measures. This should not be taken to mean that we are downplaying its importance in any way. Energy conservation is a means of buying time until the renewable energy option can be implemented.

A further issue raised by the Energy Strategy report is that there is no indication of how Canada's energy demands are going to be satisfied beyond the 1980's. Because of the long lead time required to develop new energy sources, it is critical that decisions on long-term energy strategy should influence present-day policies, decisions and investments. It is essential that we provide a significant proportion of Canada's energy needs by 2020, say more than 30 per cent, to be necessary that a start be made immediately. Unless today's initiatives are designed so that they can make best use of passive solar radiation and can be easily retrofitted for solar space and water heating systems, it will be impossible to implement the solar energy option rapidly in the future.

The Energy Strategy report also raises, but does not answer, the issue of industrial substitution. There is no clear cut policy on how the government intends to reduce low-grade energy sources such as solar energy will be substituted for high-grade sources such as fossil fuels. Moreover, there is no indication on what percentage of our future energy needs will be low grade and percentage will be high grade. This information is essential in deciding whether we need the high-grade fossil fuel resources by the late 1980's.

THE MIDDLETON REPORT

The estimate of the potential of solar energy contained in the Energy Strategy report was based in part on a detailed study carried out by Middleton Associates of Toronto on the behalf of the Federal Government. This preliminary study investigated some sixteen renewable energy technologies:

- A. Direct Solar: Solar space heating
Solar air conditioning
Photovoltaics
Solar Thermal Energy Conversion
Solar ponds
Solar greenhouses
- B. Wind: Large-scale wind generator (less than 10 kw)
Small-scale wind generator (over 10 kw)
- C. Biomass: Energy plantation (Electrical generation)
Pyrolysis (Urban wastes)
Methanol production
Anaerobic digestion (Livestock wastes)
Wood furnace
- D. Other: Heat pump
Heat engine (Arctic thermal gradients)
Wave generator

Tidal, geothermal and small-scale hydro-electric systems were not included.

In order to estimate the potential of solar energy by 1990, the study took into account three factors:

- 1) The technical viability of solar technology;
- 2) The economic viability of solar technology to produce the same quantity of energy for a specific use at less cost than by conventional methods;
- 3) The scale and rate at which a solar energy option can realistically be implemented.

In developing the estimate, two major assumptions were made. First, it was assumed that if solar technology were viable, cost competitive and readily available, the consumer would choose solar energy in preference to other conventional energy sources. Of course, in practice, there is no guarantee that the consumer will indeed behave in such a rational manner.

THE MIDDLETOWN REPORT

The estimate of the potential of solar energy contained in the Energy Strategy report was based in part on a detailed study carried out by Middletown Associates of Toronto on the behalf of the Federal Government. This preliminary study investigated some sixteen renewable energy technologies:

- | | |
|---|---|
| <p>A. Direct Solar:</p> <ul style="list-style-type: none"> Solar space heating Solar air conditioning Photovoltaics Solar Thermal Energy Conversion Solar ponds Solar greenhouse Large-scale wind generator (less than 10 MW) Small-scale wind generator (less than 10 kW) Energy plantation (biological production) Hydrolysis (urban wastes) Methanol production Anaerobic digestion (livestock waste) Wood burning Heat pump Heat engine (solar thermal gradient) Wave generator | <p>B. Wind:</p> <p>C. Biomass:</p> <p>D. Other:</p> |
|---|---|

Tidal, geothermal and small-scale hydroelectric systems were not included.

In order to estimate the potential of solar energy by 1980, the study took into account three factors:

- 1) The technical viability of solar technology;
- 2) The economic viability of solar technology to produce the same quantity of energy for a specific use at less cost than by conventional methods;
- 3) The scale and rate at which a solar energy option can realistically be implemented.

In developing the estimate, two major assumptions were made. First, it was assumed that if solar technology were viable, cost competitive and readily available, the consumer would choose solar energy in preference to other conventional energy sources. Of course, in practice, there is no guarantee that the consumer will indeed behave in such a rational manner.

The second assumption made in arriving at the estimate of a 2 to 4 per cent share for solar energy was that the only action the federal government would take to encourage the development of solar energy would be to increase the price of fossil fuels. As the Energy Strategy report itself admits, if certain government initiatives were undertaken the percentage share of solar energy could be increased still further. As far as we know, there are no official estimates of how much greater the percentage share could in fact be.

Our opinion is that the percentage share could conceivably be doubled (that is, to between 6 and 12 per cent of primary energy demand by 1990) although this of course assumes a vigorous program of government support, which at the present time seems most unlikely.

GOVERNMENT SUPPORT FOR SOLAR ENERGY

In order to bring about the rapid development of solar energy, there is a need for an intensive program of support from both Federal and Provincial governments. This program could be justified on two main grounds:

- 1) The long-term cost benefits of solar energy are not reflected in the present cost of solar energy;
- 2) Other new forms of energy, including frontier oil and gas, receive considerable support and financial assistance from the government.

The problem with solar energy and other alternative forms of renewable energy is that they are initially capital-intensive and at the time are probably not quite economically competitive with conventional forms of energy. The reason that solar energy is not economically competitive is that conventional fossil fuels are at present being sold at artificially low prices.

It is tragic that the price of fossil fuels today does not take into account the future worth of these resources to future generations of Canadians. It is sheer stupidity that fossil fuels are being depleted on low-grade uses like heating when viable alternatives exist. When it is taken into account that over 30 per cent of Canada's total energy bill is used on heating, the potential saving of fossil fuel resources by the use of alternative methods is tremendous. We should not be burning up our oil and gas resources for heating purposes, but should be saving them for more significant high-grade uses.

The second significant factor in arriving at the estimate of a 5 to 1 pay back ratio for solar energy was that the only action the Federal Government would take to encourage the development of solar energy would be to increase the price of fossil fuels. As the Energy Research report itself states, it is certain that government initiatives were undertaken the past several years of which energy would be the most significant. As far as we know, there are no official estimates of how much greater the payback ratio could be.

Our opinion is that the payback ratio could conceivably be halved (that is, to between 2 and 1) but not to below 1.5 unless energy demand by 1950 is reduced to the point where a vigorous program of government support, which at the present time seems most unlikely.

GOVERNMENT SUPPORT FOR SOLAR ENERGY

In order to bring about the rapid development of solar energy, there is a need for an intensive program of support from both Federal and State governments. This program could be justified on two main grounds: 1) The long-term cost benefits of solar energy are not reflected in the present cost of solar energy; 2) Other new forms of energy, including fusion, oil and gas, require considerable support and financial assistance from the government.

The problem with solar energy and other alternative forms of renewable energy is that they are initially capital-intensive and at the time are relatively not price sensitive competitive with conventional forms of energy. The reason that solar energy is not economically competitive is that conventional fossil fuels are at present being sold at artificially low prices.

It is likely that the price of fossil fuels today does not take into account the future worth of these resources to future generations of Canadians. It is likely, therefore, that fossil fuels are being depleted on low-grade basis like harvesting when viable alternatives exist. When it is taken into account that over 50 per cent of Canada's total energy bill is used on heating, the potential saving in fossil fuel resources by the use of alternative methods is tremendous. We should not be burning up our oil and gas resources for heating purposes, but should be saving them for more significant high-grade uses.

The implications of these remarks are that while the Middleton Report showed that only 2 to 4 per cent of energy demand by 1990 could be provided at competitive prices by solar energy, the system of economic analysis used is somewhat open to question. Assuming a cost benefit approach were adopted, a higher percentage could then be justified.

GOVERNMENT SUPPORT FOR THE DEVELOPMENT OF NEW FORMS OF ENERGY

Solar energy is also at a competitive disadvantage in that other new forms of energy have received considerable support and financial assistance from the government.

This is particularly true of the large oil companies exploring for oil and gas in the north. Assuming the pipeline is built, these companies will benefit from several direct and indirect subsidies. First, the government will provide the support services to the pipeline. One estimate has put the direct costs to the government as high as \$500 million for such items as health services, roads, serviced land and docks.³

Second, the government will presumably have to provide a generous land settlement to the native people to compensate them for the land required for northern development. The financial compensation could amount to several millions of dollars.

Third, the government will pick up most of the bills for the environmental and social costs of pipeline construction and related developmental activities. The bill for the social costs in particular will be very high and it would be several generations before the final total is known. Thanks to a combination of misplaced government paternalism and the left-handed generosity of the oil companies, the lifestyles of local people in the Mackenzie communities are being transformed. Instead of being self-sufficient and living off the land, they are being seduced by a high energy lifestyle. When the oil and gas bonanza is over, the native people may find it almost impossible to return to their own way of life, even if by that time they wanted to.

The implications of these remarks are that while the Malaysian Government showed that only 1 to 4 per cent of energy demand by 1980 could be provided as cogenerative power by solar energy, the system of economic analysis used is somewhat open to question. Assuming a cost benefit approach were adopted, a higher percentage could then be justified.

GOVERNMENT SUPPORT FOR THE DEVELOPMENT OF NEW FORMS OF ENERGY

Solar energy is also at a competitive disadvantage in that other new forms of energy have received considerable support and financial assistance from the Government.

This is particularly true of the large oil companies exploring for oil and gas in the north. Assuming the pipeline in Borneo, these companies will benefit from several direct and indirect subsidies. First, the Government will provide the support services to the pipeline. One estimate has put the direct costs to the Government as high as \$500 million for such items as health services, roads, serviced land and docks.

Second, the Government will presumably have to provide a generous land concession to the native people to compensate them for the land needed for transport development. The financial compensation could amount to several millions of dollars.

Third, the Government will pick up most of the bills for the environmental and social costs of pipeline construction and related developmental activities. The bill for the social costs in particular will be very high and it would be several generations before the final total is known. Thanks to a combination of widespread government paternalism and the left-handed generosity of the oil companies, the lifestyles of local people in the Malaysian communities are being transformed instead of being self-sufficient and living off the land. They are being seduced by a high energy lifestyle. When the oil and gas bonanza is over, the native people may find it almost impossible to return to their own way of life, even if by that time they wanted to.

The government could not then leave the people stranded but would have to take some of the responsibility for its actions and continue to support these people until they could become economically self-sufficient once again. This might take generations and meanwhile the cost to the Canadian taxpayer will be millions of dollars.

A further indirect subsidy that the oil companies receive is that they can discount most of the costs of developing expensive frontier oil against the easy profits made on more readily accessible fossil fuel resources.

Because of these hidden subsidies, the large oil companies exploring for oil and gas in the north have certain competitive advantages over the individual homeowner exploring for energy on his roof with a solar collector. To compensate for the tax breaks given to the oil companies and the additional indirect subsidies provided by the government, we suggest that the government should consider introducing a massive program of support for solar energy. Either the government could allow the individual homeowner to deduct a portion of the capital cost of solar energy against his or her tax bill each year; or alternatively, the government could provide an outright grant to all homeowners who install solar energy.

Another measure that could be introduced is the compulsory use of renewable energy for the luxury uses of low-grade energy such as the heating of private swimming pools.

The net effect of these measures would be to accelerate the acceptance of solar energy and increase its percentage share of total energy demand.

THE MACKENZIE VALLEY PIPELINE OR SOLAR ENERGY?

In the introduction to this brief, we suggested that the rapid development of solar energy combined with an intensive program of energy conservation was a potentially viable alternative to the immediate development of the frontier resources of the Mackenzie Delta and the consequent need to build the Mackenzie Valley pipeline. Leaving aside the wider issues of pollution, social breakdown, resource depletion, and long-term energy policy, the acid test is whether the solar energy option can provide the same quantity of energy as that which could be delivered through a Mackenzie Valley pipeline at a comparative cost in a comparable period of time.

The government could not then leave the people stranded but would have to take some of the responsibility for its actions and continue to support these people until they could become economically self-sufficient once again. Their right to generations and meanwhile the cost to the Canadian taxpayer will be millions of dollars.

A further indirect subsidy that the oil companies receive is that they can discount most of the costs of developing expensive frontier oil against the easy profits made on more readily accessible local resources.

Because of these hidden subsidies, the large oil companies exploring for oil and gas in the north have certain competitive advantages over the individual homeowner exploring for energy on his roof with a solar collector. To compensate for the tax breaks given to the oil companies and the additional indirect subsidies provided by the government, we suggest that the government should consider introducing a massive program of support for solar energy. Either the government could allow the individual homeowner to deduct a portion of the capital cost of solar energy against his or her tax bill each year or alternatively, the government could provide an outright grant to all homeowners who install solar energy.

Another measure that could be introduced is the compulsory use of renewable energy for the heavy use of low-grade energy such as the heating of private buildings.

The net effect of these measures would be to accelerate the acceptance of solar energy and increase its percentage share of total energy demand.

THE MACKENZIE VALLEY PIPELINE OR SOLAR ENERGY?

In the introduction to this trial, we suggested that the rapid development of solar energy combined with an intensive program of energy conservation was a potentially viable alternative to the immediate development of the frontier resources of the Mackenzie Delta and the consequent need to build the Mackenzie Valley pipeline. Leaving aside the wider issues of pollution, social breakdown, resource depletion and long-term energy policy, the acid test is whether the solar energy option can provide the same quantity of energy as that which could be delivered through a Mackenzie Valley pipeline at a comparative cost in a comparable period of time.

In order to compare the two options, let us examine in detail the quantity of energy that could be provided via the Mackenzie pipeline. Last year's figures given for the proven, probable and possible reserves in the delta areas are between 3.8 and 6.1 trillion cubic feet, which will amount to between 3,800 and 6,100 trillions of btu's of energy.⁴ This is not very much. In the recent energy strategy announced by the Federal Government, it is estimated that the demand for natural gas by 1990 will be at most 3,000 trillions of btu's per year. In other words, there is approximately two years' supply of natural gas in total in the Mackenzie Delta, although it can be assumed that the gas will be supplied and used over a number of years.

The estimate of 3 to 6 per cent as the share of total demand for renewable energy by 1990 means that between 500 and 1,000 trillions of btu's could be provided each year from renewable energy sources.

This means that if the assumption is made that the natural gas from the Mackenzie Delta would not come on stream until the late 1980's, the same amount of energy that can be provided via the Mackenzie Valley pipeline can be provided by renewable energy at comparable cost and at almost the same rate. With a suitable program of interfuel substitution, this energy can be deployed so that the existing high-grade uses of natural gas can be satisfied by other sources of fossil fuels, these sources being made available through substitution by renewable energy.

Moreover, we have attempted to show that given a vigorous program of government support and assistance comparable to the billions of dollars of subsidy that northern development is receiving, the percentage share of solar energy could be increased further and possibly even doubled. In short, the rapid development of solar energy combined with an intensive program of energy conservation is indeed a potentially viable option.

In order to compare the two options, let us examine in detail the quantity of energy that could be provided via the Trans-Alaska Pipeline. Last year's figures given for the proven, probable and possible reserves in the Delta area are between 1.5 and 2.1 trillion cubic feet, which will amount to between 1,500 and 2,100 trillion Btu's of energy. This is not very much. In the recent energy strategy announced by the Federal Government, it is estimated that the demand for natural gas by 1980 will be at least 3,000 trillion Btu's per year. In other words, there is approximately two years' supply of natural gas in total in the Delta area, although it can be assumed that the gas will be applied and used over a number of years.

The estimate of 5 to 6 per cent of the total demand for renewable energy by 1980 means that between 500 and 1,000 trillion Btu's would be produced each year from renewable energy sources.

This means that if the assumption is made that the natural gas from the Delta would not come on stream until the late 1980's, the same amount of energy that can be provided via the Trans-Alaska Pipeline can be provided by renewable energy at comparable cost and at almost the same rate. With a suitable program of internal substitution, this energy can be deployed so that the existing high-grade uses of natural gas can be satisfied by other sources of fossil fuels, thereby making being made available through substitution by renewable energy.

Moreover, we have attempted to show that given a vigorous program of government support and assistance comparable to the billions of dollars of subsidy that northern development is receiving, the percentage share of solar energy could be increased further and possibly even doubled. In short, the rapid development of solar energy combined with an intensive program of energy conservation is indeed a potentially viable option.

RECOMMENDATION: COST BENEFIT STUDY FOR RENEWABLE ENERGY

We would like to raise one more point that is brought out by the Energy Strategy report. In discussing renewable energy, the admission is made that an evaluation of the full range of costs and benefits associated with renewable energy technologies has yet to be carried out. We find it very difficult to understand how the Federal Government can intelligently develop a long-term energy policy unless this work has been completed.

Similarly, we cannot understand how a decision can be made on whether the building of the Mackenzie Valley pipeline should proceed unless alternative courses of action have been fully evaluated.

We therefore recommend that before a decision is made to build the Mackenzie Valley pipeline there should be a full public investigation of the potential of renewable energy. Only when these studies and hearings have taken place and conclusions drawn should a decision be taken on whether the pipeline is necessary.

CONCLUSION

In conclusion, we would like to thank the native peoples of the Mackenzie Valley, for it was mainly their efforts that forced the government to take a second look at the need to build a Mackenzie Valley pipeline. We hope that in reappraising Canada's energy strategy, the government takes inspiration from the traditional, self-sufficient lifestyle of the native peoples. For thousands of years, these people have lived with the land and with the climate. Their tradition is our survival for the future.

FOOTNOTES

1. An Energy Policy for Canada: Policies for Self-Reliance, Department of Energy, Mines and Resources, Ottawa, 1976.
2. Canada's Renewable Energy Resources: An Assessment of Potential, Peter Middleton and Associates, Inc., Toronto, May 1976.
3. Page, Robert: The Mackenzie Valley Pipeline and Canadian Priorities. Written presentation, House of Commons Standing Committee on Natural Resources and Public Works, 5 February 1976.
4. National Energy Board Hearings. Evidence submitted by Canadian Arctic Gas. Report by consultants J.C. Scroule Associates Limited, Calgary: 3.83 proven, 0.75 probable and 1.51 possible (figures refer to trillions of btu's). July, 1975.

RECOMMENDATION: COST-BENEFIT STUDY FOR RENEWABLE ENERGY

We would like to raise one more point that is brought out by the Energy Strategy report. In discussing renewable energy, the conclusion is made that an evaluation of the full range of costs and benefits associated with renewable energy technologies has yet to be carried out. We find it very difficult to understand how the Federal Government can intelligently develop a long-term energy policy unless this work has been completed.

Similarly, we cannot understand how a decision can be made on whether the building of the Mackenzie Valley pipeline should proceed unless alternative courses of action have been fully evaluated.

We therefore recommend that before a decision is made to build the Mackenzie Valley pipeline there should be a full public investigation of the potential of renewable energy. Only when these studies and hearings have taken place and conclusions drawn should a decision be taken on whether the pipeline is necessary.

CONCLUSION

In conclusion, we would like to thank the native peoples of the Mackenzie Valley. It was mainly their efforts that forced the government to take a second look at the need to build a Mackenzie Valley pipeline. We hope that in recognizing Canada's energy strategy, the government takes inspiration from the traditional, self-sufficient lifestyle of the native peoples. For thousands of years, these people have lived with the land and with the climate. Their tradition is our survival for the future.

FOOTNOTES

1. An Energy Policy for Canada: Policies for Self-Reliance, Department of Energy, Mines and Resources, Ottawa, 1975.
2. Canada's Renewable Energy Resources: An Assessment of Potential, Peter Middleton and Associates, Inc., Toronto, May 1976.
3. Page, Robert: The Mackenzie Valley Pipeline and Canadian Policy, Western Presentation, House of Commons Standing Committee on Natural Resources and Public Works, 2 February 1976.
4. National Energy Board Hearings. Evidence submitted by Canadian Arctic Gas, report by consultants J.C. Stachurski Associates Limited, Calgary, 3.83 grown, 0.75 pounds and 1.51 possible (figures refer to millions of bbl's), July, 1975.

C563



THE CANADIAN COUNCIL OF PROFESSIONAL ENGINEERS

LE CONSEIL CANADIEN DES INGÉNIEURS

SUITE 401, 116 ALBERT, OTTAWA, ONT. K1P 5G3
TELEPHONE: 613/232-2474 CABLE: CANPROFENG

MR. COMMISSIONER,

MY NAME IS MCGEE. I AM THE ACTING GENERAL MANAGER OF THE CANADIAN COUNCIL OF PROFESSIONAL ENGINEERS. THE COUNCIL IS A FEDERATION OF ELEVEN PROVINCIAL AND TERRITORIAL ASSOCIATIONS OF PROFESSIONAL ENGINEERS IN CANADA. THROUGH ITS CONSTITUENT ASSOCIATIONS, IT GROUPS ALL OF THIS COUNTRY'S 85,000 PROFESSIONAL ENGINEERS AND IT HAS BECOME GENERALLY RECOGNIZED AS THE NATIONAL VOICE OF THE PROFESSION.

THE PURPOSE AND OBJECTS OF THE COUNCIL INCLUDE THAT OF PROMOTING AND MAINTAINING HIGH STANDARDS IN THE ENGINEERING PROFESSION; PROMOTING THE PROFESSIONAL, SOCIAL AND ECONOMIC WELFARE OF THE MEMBERS OF THE ENGINEERING PROFESSION; PROMOTING A KNOWLEDGE AND APPRECIATION OF ENGINEERING AND OF THE ENGINEERING PROFESSION AND ENHANCING ITS USEFULNESS TO THE PUBLIC; PROMOTING THE ADVANCEMENT OF ENGINEERING AND RELATED EDUCATION AND GENERALLY CARRYING OUT OTHER RELATED FUNCTIONS.

THE ROLE OF THE COUNCIL IS TO ACT ON BEHALF OF AND TO PRESENT THE VIEWS OF ITS CONSTITUENT ASSOCIATIONS AND ORGANIZATIONS IN MATTERS THAT ARE NATIONAL OR INTERNATIONAL IN SCOPE.

THE COUNCIL HAS BEEN IN SUCH MATTERS AS ADMISSION STANDARDS, ASSESSMENT OF CANADIAN AND FOREIGN DEGREES FOR REGISTRATION PURPOSES, PROFESSIONAL ETHICS, LEGISLATION, PROFESSIONAL GUIDANCE, MANPOWER STUDIES AND THE MOBILITY OF ENGINEERS BETWEEN PROVINCES.

THE COUNCIL MAINTAINS A CONTINUING OVERVIEW OF FEDERAL LEGISLATION AND RELATED MATTERS.



MR. COMMISSIONER,

MY NAME IS ROBERT. I AM THE ACTING GENERAL MANAGER

OF THE CANADIAN COUNCIL OF PROFESSIONAL ENGINEERS. THE
COUNCIL IS A FEDERATION OF ELEVEN PROVINCIAL AND TERRITORIAL
ASSOCIATIONS OF PROFESSIONAL ENGINEERS IN CANADA. THROUGH
ITS CONSTITUENT ASSOCIATIONS, IT GROUPS ALL OF THIS COUNTRY'S
82,000 PROFESSIONAL ENGINEERS AND IT HAS BECOME GENERALLY
RECOGNIZED AS THE NATIONAL VOICE OF THE PROFESSION.

THE PURPOSE AND OBJECTS OF THE COUNCIL INCLUDE THAT
OF PROMOTING AND MAINTAINING HIGH STANDARDS IN THE ENGINEERING
PROFESSION, PROMOTING THE PROFESSIONAL, SOCIAL AND ECONOMIC
WELFARE OF THE MEMBERS OF THE ENGINEERING PROFESSION,
PROMOTING A KNOWLEDGE AND APPRECIATION OF ENGINEERING AND
OF THE ENGINEERING PROFESSION AND EMPHASIZING ITS USEFULNESS
TO THE PUBLIC, PROMOTING THE ADVANCEMENT OF ENGINEERING AND
RELATED EDUCATION AND GENERALLY CARRYING OUT OTHER RELATED
FUNCTIONS.

THE ROLE OF THE COUNCIL IS TO ACT ON BEHALF OF AND
TO PRESENT THE VIEWS OF ITS CONSTITUENT ASSOCIATIONS AND
ORGANIZATIONS IN MATTERS THAT ARE NATIONAL OR INTERNATIONAL
IN SCOPE.

THE COUNCIL HAS BEEN IN SUCH MATTERS AS ADMISSION
STANDARDS, ASSESSMENT OF CANADIAN AND FOREIGN DEGREES FOR
REGISTRATION PURPOSES, PROFESSIONAL ETHICS, LEGISLATION,
PROFESSIONAL GUIDANCE, HARBOR STUDIES AND THE MOBILITY
OF ENGINEERS BETWEEN PROVINCES.

THE COUNCIL MAINTAINS A CONTINUING OVERVIEW OF
FEDERAL LEGISLATION AND RELATED MATTERS.

ENGINEERS ARE ALSO, TO AN INCREASING DEGREE, CONCERNED WITH PUBLIC AFFAIRS AND IN POSITIONS TO STATE THE VIEWS OF THIS IMPORTANT ELEMENT OF THE POPULATION NOW AT A RATIO OF ONE ENGINEER TO EVERY 275 CANADIANS.

IT CAN BE SAID THAT THE MAIN MISSION OF THE CANADIAN ENGINEER IS TO HARVEST TECHNOLOGY AND DEVELOP NATURAL RESOURCES FOR THE CREATION OF A BETTER LIFE FOR ALL THE PEOPLE OF THIS NATION. THERE ARE REALLY MANY REASONS TO BE PROUD OF THE ACHIEVEMENTS AND CONTRIBUTIONS OF CANADIAN ENGINEERS.

THE ENGINEER HAS DEVELOPED MACHINES AND TECHNIQUES TO INCREASE PRODUCTIVITY. HE HAS DEVELOPED PROCEDURES AND EQUIPMENT THAT HAVE MADE IT POSSIBLE FOR REMOTE REGIONS OF CANADA TO BE DEVELOPED AND TO BECOME, TO A GREAT EXTENT, SELF-SUPPORTING. HE IS PUSHING BACK THE FRONTIERS OF CANADA TO THE MOST REMOTE CORNERS OF OUR GREAT COUNTRY.

WE OFTEN FORGET, IN THE ONWARD RUSH OF PROGRESS, THAT JUST ABOUT EVERYONE IN CANADA AND IN MOST INDUSTRIALIZED NATIONS, LIVES BETTER TODAY THAN THE ELITE OF YESTERDAY.

THE ENGINEERING BREAKTHROUGH IN SATELLITE COMMUNICATION HAS CREATED A NEW ERA FOR ALL OF US.

AS OTHER FRONTIER AREAS ARE DEVELOPED BY A MINING AND PETROLEUM INDUSTRY, SATELLITE COMMUNICATION WILL BE A VITAL FACTOR BOTH FROM AN OPERATING POINT OF VIEW AS WELL AS IN CULTURAL TERMS.

THE ENGINEER BRINGS TO HIS JOB, INDIVIDUALITY, INTEGRITY, INTELLECTUAL DISCIPLINE, APPLICATION OF SCIENCE TO HIS ENGINEERING ART AND RESPONSIBILITY TO THE SOCIETY IN WHICH HE LIVES.

ENGINEERS ARE ALSO, TO AN INCREASING DEGREE, CONCERNED WITH PUBLIC AFFAIRS AND IN POSITIONS TO STATE THE VIEWS OF THIS IMPORTANT ELEMENT OF THE POPULATION. NOW AT A RATIO OF ONE ENGINEER TO EVERY 125 CANADIANS.

IT CAN BE SAID THAT THE MAIN MISSION OF THE CANADIAN ENGINEER IS TO HARVEST TECHNOLOGY AND DEVELOP NATURAL RESOURCES FOR THE CREATION OF A BETTER LIFE FOR ALL THE PEOPLE OF THIS NATION. THERE ARE REALLY MANY REASONS TO BE PROUD OF THE ACHIEVEMENTS AND CONTRIBUTIONS OF CANADIAN ENGINEERS.

THE ENGINEER HAS DEVELOPED MACHINES AND TECHNIQUES TO INCREASE PRODUCTIVITY. HE HAS DEVELOPED PROCESSES AND EQUIPMENT THAT HAVE MADE IT POSSIBLE FOR REMOTE REGIONS OF CANADA TO BE DEVELOPED AND TO BECOME, TO A GREAT EXTENT, SELF-SUPPORTING. HE IS PUSHING BACK THE FRONTIERS OF CANADA TO THE MOST REMOTE CORNERS OF OUR GREAT COUNTRY.

WE OFTEN FORGET, IN THE ONWARD RUSH OF PROGRESS, THAT JUST ABOUT EVERYONE IN CANADA AND IN MOST INDUSTRIALIZED NATIONS, LIVES BETTER TODAY THAN THE ELITE OF YESTERDAY.

THE ENGINEERING BREAKTHROUGH IN SATELLITE COMMUNICATION HAS CREATED A NEW ERA FOR ALL OF US.

AS OTHER FRONTIER AREAS ARE DEVELOPED BY A MINING AND PETROLEUM INDUSTRY, SATELLITE COMMUNICATION WILL BE A VITAL FACTOR BOTH FROM AN OPERATING POINT OF VIEW AS WELL AS IN CULTURAL TERMS.

THE ENGINEER BRINGS TO HIS JOB, INDIVIDUALITY, INTEGRITY, INTELLECTUAL DISCIPLINE, APPLICATION OF SCIENCE TO HIS ENGINEERING ART AND RESPONSIBILITY TO THE SOCIETY IN WHICH HE LIVES.

UNDERGRADUATES TODAY IN ENGINEERING ARE BEING TRAINED TO DEVELOP SKILLS IN THE SOCIAL SCIENCES AS WELL AS IN ENGINEERING. THE ENGINEER OF TODAY OFFERS TO HIS COUNTRY, HIS EXPERIENCE, HIS ABILITY TO INTELLECTUALLY ANALYZE AND HIS ABILITY TO IMPART PROFESSIONAL KNOWLEDGE OF VERY COMPLEX SYSTEMS AND SITUATIONS.

MR. COMMISSIONER, YOU DID RECEIVE A SUBMISSION FROM ONE OF THE CONSTITUENT ASSOCIATIONS OF OUR COUNCIL, THAT IS THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF ALBERTA, A DOCUMENT DATED MAY 17, 1976.

IT IS THE WISH OF THE COUNCIL, SPEAKING ON BEHALF OF THE ENGINEERING PROFESSION IN CANADA, TO STATE CLEARLY THAT IT STRONGLY SUPPORTS THE EARLIER APPROVAL OF THE MACKENZIE VALLEY PIPELINE PROJECT, THUS AVOIDING A CRISIS IN PLANNING AND THEREBY PERMITTING THE ACHIEVEMENT OF A BALANCED SOLUTION TO PROBLEMS INVOLVING NATIVE RIGHTS - ENVIRONMENTAL PROTECTION - ECONOMIC STABILITY AND A CONTROLLED REDUCTION OF THE IMPACT OF THE ENERGY CRISIS FOR THE BENEFIT OF ALL CANADIANS.

THIS COUNCIL IS STRONGLY IN FAVOUR OF CANADIAN INPUT IN THIS CANADIAN DEVELOPMENT, SUPPORTING THE POSITION TAKEN BY THE MINISTER OF INDIAN AND NORTHERN AFFAIRS, IN THE HOUSE OF COMMONS ON JULY 25TH LAST YEAR.

MR. COMMISSIONER, IT MUST BE RE-EMPHASIZED THAT WHETHER WE AS CANADIANS WISH IT OR NOT, THE IMMENSE DEMAND FOR ENERGY WILL INCREASE AND BECOME VIRTUALLY AN IRRESISTABLE FORCE. AN ENERGY SHORT-FALL WILL AFFECT THE STANDARD OF LIVING OF ALL CANADIANS AND THE NORTH WILL NOT BE EXEMPT. OUR ONLY SOLUTION IS TO COME TO GRIPS WITH THIS NATIONAL PROBLEM NOW BY BEGINNING THE VERY EXTENSIVE PLANNING PROCESS NECESSARY SO THAT WE WILL HAVE SOME CHANCE OF BEING READY WHEN THE FULL AFFECT OF THE CRISIS IS FINALLY FELT.

UNDERSTANDS TODAY IN ENGINEERING ARE BEING
 TRAINED TO DEVELOP SKILLS IN THE SOCIAL SCIENCES AS WELL
 AS IN ENGINEERING. THE ENGINEER OF TODAY OFFERS TO HIS
 COUNTRY, HIS EXPERIENCE, HIS ABILITY TO INTELLECTUALLY
 ANALYZE AND HIS ABILITY TO IMPART PROFESSIONAL KNOWLEDGE
 OF VERY COMPLEX SYSTEMS AND SITUATIONS.

MR. COMMISSIONER, YOU DID RECEIVE A SUBMISSION FROM
 ONE OF THE CONSTITUENT ASSOCIATIONS OF OUR COUNCIL, THAT
 IS THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS
 AND GEOPHYSICISTS OF ALBERTA, A DOCUMENT DATED MAY 17, 1976.
 IT IS THE WISH OF THE COUNCIL, SPEAKING ON BEHALF OF
 THE ENGINEERING PROFESSION IN CANADA, TO STATE CLEARLY THAT
 IT STRONGLY SUPPORTS THE EARLIER APPROVAL OF THE MACKENZIE
 VALLEY PIPELINE PROJECT, THEREBY AVOIDING A CRISIS IN PLANNING
 AND THEREBY PERMITTING THE ACHIEVEMENT OF A BALANCED
 SOLUTION TO PROBLEMS INVOLVING NATIVE RIGHTS - ENVIRONMENTAL
 PROTECTION - ECONOMIC STABILITY AND A CONTROLLED REDUCTION
 OF THE IMPACT OF THE ENERGY CRISIS FOR THE BENEFIT OF ALL
 CANADIANS.

THIS COUNCIL IS STRONGLY IN FAVOUR OF CANADIAN INTEREST
 IN THIS CANADIAN DEVELOPMENT, SUPPORTING THE POSITION TAKEN
 BY THE MINISTER OF INDIAN AND NORTHERN AFFAIRS, IN THE
 HOUSE OF COMMONS ON JULY 25TH LAST YEAR.

MR. COMMISSIONER, IT MUST BE RE-EMPHASIZED THAT
 WHETHER WE AS CANADIANS WISH IT OR NOT, THE IMMENSE DEMAND
 FOR ENERGY WILL INCREASE AND BECOME VIRTUALLY AN INEVITABLE
 FORCE. AN ENERGY SHORT-FALL WILL AFFECT THE STANDARD OF
 LIVING OF ALL CANADIANS AND THE NORTH WILL NOT BE EXEMPT.
 OUR ONLY SOLUTION IS TO COME TO GRIPS WITH THIS NATIONAL
 PROBLEM NOW BY BEGINNING THE VERY EXTENSIVE PLANNING PROCESS
 NECESSARY SO THAT WE WILL HAVE SOME CHANCE OF BEING READY
 WHEN THE FULL EFFECT OF THE CRISIS IS FINALLY FELT.

WE STRONGLY AND SINCERELY URGE THAT PLANNING AND CONSTRUCTION OF THE MACKENZIE VALLEY PIPELINE BEGIN AS SOON AS POSSIBLE SO THAT ORDERLY AND CONTROLLED DEVELOPMENT WILL RESULT IN THE INTEREST OF ALL CANADIANS.

PERMIT ME, MR. JUSTICE BERGER, NOW, A FEW SHORT MINUTES TO TALK ABOUT MY HERITAGE, THAT IS MY ENGINEERING HERITAGE.

THE STORY OF CIVILIZATION IS, IN MANY WAYS, THE STORY OF MAN'S STRUGGLE TO FIRST EXIST AND THEN TO IMPROVE ON PROGRESS BOTH IN WELFARE AND UNDERSTANDING. ONE SIDE OF THIS STORY - THE SIDE WHICH SECURES THE LONG AND ARGUOUS STRUGGLE TO MAKE THE FORCES OF NATURE WORK FOR MAN'S GOOD, IS THE STORY OF ENGINEERING. IT IS A STORY WHICH, PIECED TOGETHER FROM DUSTY MANUSCRIPTS AND CRUMBLING RELICS, EXPLAINED THE STATE OF THE WORLD TODAY AS WELL AS THE ACCOUNTS OF KINGS AND PHILOSOPHERS, GENERALS AND POLITICIANS. A MILLION YEARS AGO, AT THE BEGINNING OF THE PLASTICINE PERIOD, ALL ANCESTERS WERE SMALL APE-LIKE PRIMATES MUCH LIKE THE MAN-APES WHOSE FOSSIL REMAINS HAVE BEEN FOUND IN AFRICA. PROBABLY AS EARLY AS 100,000, YEARS AGO, BEFORE THE LAST ADVANCE OF THE PLASTICINE GLACIERS AND CERTAINLY BY 10,000 YEARS AGO, THE FORCES OF EVOLUTION HAD CAUSED THESE MAN-APES TO EVOLVE AND TO MEND EVERY BIT OF HIS HUMAN FORM AND ABLE TO THINK AND REALIZE THE SAME AS WE.

MAN HAS SPENT ABOUT 99% OF HIS HISTORY SINCE HE LEARNED TO MAKE TOOLS AS A HUNTING AND FOOD GATHERING TRIBESMAN. CIVILIZATION HAS ARISEN ONLY DURING THE REMAINING 1% OF THIS TIME SINCE 9,000 TO 10,000 YEARS AGO WHEN MAN DISCOVERED HOW TO RAISE CROPS AND TO TAME ANIMALS. THE FIRST ENGINEERS WERE IRRIGATORS, ARTISTS AND MILITARY ENGINEERS. THE SAME MAN WAS USUALLY EXPECTED TO BE AN EXPERT IN ALL THREE KINDS OF WORK. THIS WAS STILL THE CASE THOUSANDS OF YEARS LATER WHEN DA VINCI, MICHAEL ANGELO AND DÜRER WERE NOT ONLY ALL-AROUND ENGINEERS, BUT OUTSTANDING

WE STRONGLY AND KINCERLY HOPE THAT PLANNING AND
CONSTRUCTION OF THE WACKELT VALLEY FIRELINE BEGINS AS
SOON AS POSSIBLE SO THAT ORDERLY AND CONTROLLED DEVELOPMENT
WILL RESULT IN THE INTEREST OF ALL CANADIANS.

PERMIT ME, MR. JUSTICE BEGER, NOW, A FEW SHORT
MINUTES TO TALK ABOUT MY HERITAGE, THAT IS MY ENGINEERING
HERITAGE.

THE STORY OF CIVILIZATION IS, IN MANY WAYS, THE
STORY OF MAN'S STRUGGLE TO FIRST EXIST AND THEN TO
IMPROVE ON PROGRESS BOTH IN WELFARE AND UNDERSTANDING.
ONE SIDE OF THIS STORY - THE SIDE WHICH SECURES THE
LOVE AND ARGUOUS STRUGGLE TO MAKE THE FORCES OF NATURE
WORK FOR MAN'S GOOD, IS THE STORY OF ENGINEERING. IT IS
A STORY WHICH FIELDS TOGETHER FROM DUSTY MANUSCRIPTS
AND CRUMBLING RELICS, EXPLAINING THE STATE OF THE WORLD
TODAY AS WELL AS THE ACCOUNTS OF KINGS AND PHILOSOPHERS.
GENERAL AND POLITICIAN. A MILLION YEARS AGO, AT THE
BEGINNING OF THE PLASTIC PERIOD, ALL ANCESTERS WERE
SMALL APE-LIKE PRIMATES MUCH LIKE THE MAN-APES WHOSE
FOSSIL REMAINS HAVE BEEN FOUND IN AFRICA. PROBABLY AS
EARLY AS 100,000 YEARS AGO, BEFORE THE LAST ADVANCE OF
THE PLASTIC GLACIERS AND CERTAINLY BY 10,000 YEARS AGO,
THE FORCES OF EVOLUTION HAD CAUSED THESE MAN-APES TO
EVOLVE AND TO REAP EVERY BIT OF HIS HUMAN FORM AND SOLE
TO THINK AND REALIZE THE SAME AS WE.

MAN HAS SPENT ABOUT 99% OF HIS HISTORY SINCE HE
LEARNED TO MAKE TOOLS AS A HUNTING AND FOOD GATHERING
TRIBESMAN. CIVILIZATION HAS ARISEN ONLY DURING THE
REMAINING 1% OF HIS TIME SINCE 2,000 TO 10,000 YEARS AGO
WHEN MAN DISCOVERED HOW TO RAISE CROPS AND TO TAME ANIMALS.
THE FIRST ENGINEERS WERE IRRIGATORS, ARTISTS AND MILITARY
ENGINEERS. THE SAME MAN WAS USUALLY EXPECTED TO BE AN
EXPERT IN ALL THREE KINDS OF WORK. THIS WAS STILL THE
CASE THOUSANDS OF YEARS LATER WHEN DA VINCI, MICHAEL ANGELO
AND DÜRER WERE NOT ONLY ALL-AROUND ENGINEERS, BUT OUTSTANDING

ARTISTS AS WELL. SPECIALIZATION WITHIN THE ENGINEERING PROFESSION HAS DEVELOPED ONLY IN THE LAST TWO OR THREE CENTURIES AS COMPLEXITY INCREASED. WE HEAR MUCH OF MIGHTY KINGS AND HEROIC WARRIORS, SOMEWHAT LESS ABOUT PRIESTS, PHILOSOPHERS AND ARTISTS AND VERY LITTLE ABOUT THE ENGINEERS WHO BUILT THE STAGES OF WHICH THESE PLAYERS PERFORMED THEIR PARTS. EVERYBODY HAS HEARD OF JULIUS CEASAR, BUT WHO KNOWS ABOUT HIS CONTEMPORARY SERGIUS ERRATA, THE ROMAN BUILDING CONTRACTOR WHO INVENTED CENTRAL INDIRECT HOUSE HEATING.

TO THE AGES OF HISTORY, ONE HUMAN INSTITUTION, TECHNOLOGY, HAS PLOTTED AHEAD. WHILE EMPIRES ROSE AND FELL, FORMS OF GOVERNMENT WENT THROUGH THEIR CYCLES, SCIENCE FLARED UP AND GUTTED OUT AND MEN BURNED EACH OTHER OVER DIFFERENCES OF CREED OR CULTURE, THE ENGINEERS WENT AHEAD WITH RAISING THEIR CITY WALLS, ERRECTING THEIR TEMPLES AND PALACES, PAVING THEIR ROADS, DIGGING THEIR CANALS, TINKERING WITH THEIR MACHINES AND SOBERLY AND RATIONALLY BUILDING UPON THE DISCOVERIES OF THOSE WHO HAD GONE BEFORE.

CANADA TOO HAS GROWN AND PROSPERED AS A RESULT OF THE WORK OF ITS ENGINEERS. IT IS NOT POSSIBLE TO DO JUSTICE IN ANY MODEST PERIOD OF TIME TO THEIR MERED ACCOMPLISHMENTS BUT IT IS APPROPRIATE THAT ATTENTION BE DRAWN TO A FEW OF THESE MEN OF VIGOUR AND VITALITY WHOSE SERVICES AND VISION WERE GREATLY NEEDED IN THE BUILDING OF CANADA. SURVEYS OF ALL KINDS, NOTABLE BRIDGES, GREAT CANALS, PUBLIC BUILDINGS, WATER WORKS, RAILWAYS, EVEN SUBSTANTIAL HELP IN GOVERNMENTAL MATTERS WERE NEEDED IN GREAT MEASURES IN CANADA'S EARLY YEARS AND WERE IMPLEMENTED WITH SKILL AND DISPATCH. I CAN MENTION THE NAME OF JOSEPH BOUCHETTE WHOSE FAMILY ORIGINATED IN FRANCE, AND WHOSE WORK INCLUDED HYDROGRAPHIC SURVEY OF THE HARBOUR AT YORK AND HARBOURS AT OTHER LAKE ONTARIO PORTS. THIS CITY

ARTISTS AS WELL. SPECIALIZATION WITHIN THE ENGINEERING PROFESSION HAS DEVELOPED ONLY IN THE LAST TWO OR THREE CENTURIES AS COMPLEXITY INCREASED. WE HEAR MUCH OF MIGHTY KINGS AND HEROIC WARRIORS, SOMEWHAT LESS ABOUT PRIESTS, PHILOSOPHERS AND ARTISTS AND VERY LITTLE ABOUT THE ENGINEERS WHO BUILT THE STAGES OF WHICH THESE PLAYERS PERFORMED THEIR PARTS. EVERYBODY HAS HEARD OF JULIUS CAESAR, BUT WHO KNOWS ABOUT HIS CONTEMPORARY SENIUS ERATA, THE ROMAN BUILDING CONTRACTOR WHO INVENTED CENTRAL INDIRECT HOUSE HEATING.

TO THE AGES OF HISTORY, ONE HUMAN INSTITUTION, TECHNOLOGY, HAS PLOTTED AHEAD. WHILE EMPIRES ROSE AND FELL, FORMS OF GOVERNMENT WENT THROUGH THEIR CYCLES, SCIENCE FLARED UP AND GUTTED OUT AND MEN TURNED EACH OTHER OVER DIFFERENCES OF CREED OR CULTURE, THE ENGINEERS WENT AHEAD WITH RAISING THEIR CITY WALLS, ERECTING THEIR TEMPLES AND PALACES, PAVING THEIR ROADS, DIGGING THEIR CANALS, TINKERING WITH THEIR MACHINES AND SOBERLY AND RATIONALLY BUILDING BEHIND THE DISCOVERIES OF THOSE WHO HAD GONE BEFORE.

CANADA TOO HAS GROWN AND PROGRESSED AS A RESULT OF THE WORK OF ITS ENGINEERS. IT IS NOT POSSIBLE TO DO JUSTICE IN ANY MODEST PERIOD OF TIME TO THEIR MERED ACCOMPLISHMENTS BUT IT IS APPROPRIATE THAT ATTENTION BE DRAWN TO A FEW OF THESE MEN OF VIGOUR AND VITALITY WHOSE SERVICES AND VISION WERE GREATLY NEEDED IN THE BUILDING OF CANADA. SURVEYS OF ALL KINDS, NOTABLE BRIDGES, GREAT CANALS, PUBLIC BUILDINGS, WATER WORKS, RAILWAYS, EVEN SUBSTANTIAL HELP IN GOVERNMENTAL MATTERS WERE NEEDED IN GREAT MEASURES IN CANADA'S EARLY YEARS AND WERE IMPLEMENTED WITH SKILL AND DISPATCH. I CAN MENTION THE NAME OF JOSEPH BOUCHETTE WHOSE FAMILY ORIGINATED IN FRANCE, AND WHOSE WORK INCLUDED HYDROGRAPHIC SURVEY OF THE HARBOUR AT YORK AND HARBOURS AT OTHER LAKE ONTARIO PORTS. THIS CITY

OF OTTAWA, THIS YEAR, CELEBRATES ITS 150TH ANNIVERSARY. DR. ROBERT LEGGET, AUTHOR AND ENGINEER, HAS TOLD US THE GREAT ACHIEVEMENTS OF COLONEL BY. HOW MANY OF US HAVE THE JOY AND PLEASURE OF EXPERIENCING THE BEAUTY OF NATURE ALONG THE RIDEAU WATERWAY TODAY AS A RESULT OF THE ACCOMPLISHMENTS OF A GREAT ENGINEER OF 150 YEARS AGO. I MENTION ALSO THOMAS COULTRON KEEFER OF OTTAWA, AND COMMISSIONER AT THE INTERNATIONAL EXHIBITION IN LONDON IN 1851 AND IN PARIS IN 1878 AND ONE OF THE LEADING HYDRAULIC ENGINEERS OF THE TIME ON THIS CONTINENT.

I MENTION ALSO CASIMIER STANISLEUS GZOWSKI, AN ENGINEER OF THE FIRST RANK, A FOUNDER OF TRADITIONS, A PIONEER IN THE WORKS FOR THE PUBLIC GOOD, A SOLDIER AND SERVANT OF THE CROWN.

CASIMIER GZOWSKI CONTRIBUTED GREATLY TO THE DEVELOPMENT OF RAILWAYS IN MANY PARTS OF CANADA AND IS MOST FAMOUS FOR HIS DESIGN AND CONSTRUCTION OF THE INTERNATIONAL BRIDGE FROM FORT ERIE TO BUFFALO. AT MORE RECENT TIMES, I MENTION THE HON. C.D. HOWE, THE ENGINEER WHO DID SUCH A MAGNIFICENT JOB DURING THE LAST GREAT WAR OF LEADING THIS COUNTRY FROM ONE OF AGRICULTURAL RESOURCES TO A STRONG INDUSTRIAL POSITION AND WHO ONCE SAID "THIS IS NO COUNTRY OF A PESSIMIST " IRONICALLY, MR HOWE WILL BE REMEMBERED FOR A DEBATE ABOUT ANOTHER PIPELINE IN ANOTHER AUGUST HOUSE VERY CLOSE BY TO THIS CONFERENCE CENTRE.

ON A MORE PERSONAL LEVEL, I PRESENT MYSELF HERE IN THIS CONFERENCE CENTRE WITH MEMORIES OF MY PRESENCE IN THIS SAME BUILDING 25 YEARS AGO WORKING AS AN ENGINEERING STUDENT FOR OUR NATIONAL RAILROAD SYSTEM. NOW I COME TO THIS CENTRE TO ENJOY ITS EXHIBITS AND PARTICIPATE IN ITS CONFERENCES. IT WAS PEOPLE LIKE MR. BOUCHETTE, COLONEL BY, MR. KEEFER AND MR. GZOWSKI WHOSE FORSIGHT AND COURAGEOUS OPTIMISM PROVIDED ME WITH THE OPPORTUNITY OF EMPLOYMENT

...15

OF OTTAWA, THIS YEAR, CELEBRATES ITS 150TH ANNIVERSARY.
DR. ROBERT LEGGET, AUTHOR AND ENGINEER, HAS TOLD US
THE GREAT ACHIEVEMENTS OF COLONEL BY. HOW MANY OF US
HAVE THE JOY AND PLEASURE OF EXPERIENCING THE SCENIC OF THE
NATURE ALONG THE RIDEWAY WATERWAY TODAY AS A RESULT OF THE
ACCOMPLISHMENTS OF A GREAT ENGINEER OF 150 YEARS AGO.
I MENTION ALSO THOMAS COULTON KEEPER OF OTTAWA, AND
COMMISSIONER AT THE INTERNATIONAL EXHIBITION IN LONDON
IN 1881 AND IN PARIS IN 1878 AND ONE OF THE LEADING
HYDRAULIC ENGINEERS OF THE TIME ON THIS CONTINENT.

I MENTION ALSO CASIMIR STANISLUS GZOWSKI, AN
ENGINEER OF THE FIRST RANK, A FOUNDER OF TRADITIONAL
A PIONEER IN THE WORKS FOR THE PUBLIC GOOD, A SOLDIER
AND SERVANT OF THE CROWN.

CASIMIR GZOWSKI CONTRIBUTED GREATLY TO THE
DEVELOPMENT OF RAILWAYS IN MANY PARTS OF CANADA AND IS
MOST FAMOUS FOR HIS DESIGN AND CONSTRUCTION OF THE
INTERNATIONAL BRIDGE FROM FORT ERIE TO BUFFALO. AT MORE
RECENT TIMES, I MENTION THE HON. C.D. HOWE, THE ENGINEER
WHO DID SUCH A MAGNIFICENT JOB DURING THE LAST GREAT WAR
OF LEADING THIS COUNTRY FROM ONE OF AGRICULTURAL RESOURCES
TO A STRONG INDUSTRIAL POSITION AND WHO ONCE SAID
"THIS IS NO COUNTRY OF A PESSIMIST." IRONICALLY,
MR. HOWE WILL BE REMEMBERED FOR A DEBATE ABOUT ANOTHER
PIPELINE IN ANOTHER AUGUST HOUSE VERY CLOSE BY TO THIS
CONFERENCE CENTRE.

ON A MORE PERSONAL LEVEL, I PRESENT MYSELF HERE IN
THIS CONFERENCE CENTRE WITH MEMORIES OF MY PRESENCE IN
THIS SAME BUILDING 25 YEARS AGO WORKING AS AN ENGINEERING
STUDENT FOR OUR NATIONAL RAILROAD SYSTEM. NOW I COME TO
THIS CENTRE TO ENJOY ITS EXHIBITS AND PARTICIPATE IN ITS
CONFERENCES. IT WAS PEOPLE LIKE MR. BOUCHETTE, COLONEL BY,
MR. KEEPER AND MR. GZOWSKI WHOSE FORSIGHT AND COURAGEOUS
OPTIMISM PROVIDED ME WITH THE OPPORTUNITY OF EMPLOYMENT

...../7

AND THE CHANCE TO ON AND MAKE MY CONTRIBUTION TO MY CHOSEN PROFESSION AND TO MY COUNTRY. I BELIEVE THAT MY GRANDFATHER WHO WORKED WITH THOMAS EDISON IN STANTON ISLAND, NEW YORK IN THE EARLY DAYS OF DEVELOPMENT OF OUR ELECTRIC LIGHT AND POWER SYSTEMS, WOULD BE PROUD OF ME TODAY. MY OWN FATHER, WHO WAS AN EMPLOYEE OF CANADA'S OTHER GREAT RAILROAD SYSTEM, I BELIEVE WOULD SHARE SOME OF THIS PRIDE IF HE WERE ALIVE TODAY.

THE PROFESSIONAL ENGINEERS OF THIS COUNTRY, SIR, SUBMIT TO YOUR COMMISSION THE REQUEST TO PROCEED WITH THIS PIPELINE PROJECT. WE ARE FULLY AWARE OF THE DANGERS, THE PROBLEMS, THE DIFFICULTIES AND THE SENSITIVITIES OF ALL CANADIANS. I MIGHT ADD, MR. COMMISSIONER, THAT IT WAS MY PERSONAL PRIVILEGE TO SHARE MY HOME OVER EXTENDED PERIODS OF TIME IN RECENT YEARS WITH YOUNG PEOPLE FROM OUR NATIVE CULTURES. STUDENTS STUDYING IN OTTAWA CAME TO US TO LIVE WITH MY WIFE, MYSELF AND OUR CHILDREN. THERE WERE CREE FROM MOOSE FACTORY, MONTAGNAIS FROM BERSIMIS SPEAKING IN THEIR OWN NATIVE TONGUE AS WELL AS CANADA'S SECOND OFFICIAL LANGUAGE, FRENCH, IROQUOIS FROM CAUGHNAWAGA AND A NATIVE GIRL FROM MANIWAKI CLOSEBY. THESE EXPERIENCES WERE ENRICHING TO ME, CULTURALLY AND IN EVERY OTHER WAY. I THANK THEM AS BROTHERS AND SISTERS FOR SHARING THEIR LIVES WITH US. I HAVE BEEN TO WHITEHORSE AND HAVE MET NATIVE PEOPLE THERE. I HOPE THAT MY COLLEAGUES IN THE PROFESSION WILL HAVE THESE EXPERIENCES WHICH CAN ONLY ENRICH THEIR LIVES. I HOPE THAT OUR NATIVE PEOPLE WILL BE WILLING TO SHARE THEIR CULTURE WITH ALL CANADIANS AND THAT TOGETHER WE CAN PROGRESS AND BUILD A BETTER WORLD FOR ALL MANKIND.

17

AND THE CHANCE TO GO AND MAKE MY CONTRIBUTION TO MY
CHOSEN PROFESSION AND TO MY COUNTRY. I BELIEVE THAT
MY GRANDFATHER WHO WORKED WITH THOMAS EDISON IN STANTON
ISLAND, NEW YORK IN THE EARLY DAYS OF DEVELOPMENT OF OUR
ELECTRIC LIGHT AND POWER SYSTEM, WOULD BE PROUD OF ME
TODAY. MY OWN FATHER, WHO WAS AN EMPLOYEE OF CANADA'S
OTHER GREAT RAILROAD SYSTEM, I BELIEVE WOULD SHARE SOME
OF THIS PRIDE IF HE WERE ALIVE TODAY.

THE PROFESSIONAL ENGINEERS OF THIS COUNTRY, SIR,
SUBMIT TO YOUR COMMISSION THE REQUEST TO PROCEED WITH
THIS PIPELINE PROJECT. WE ARE FULLY AWARE OF THE DANGERS,
THE PROBLEMS, THE DIFFICULTIES AND THE SENSITIVITIES OF
ALL CANADIANS. I MIGHT ADD, MR. COMMISSIONER, THAT IT
WAS MY PERSONAL PRIVILEGE TO SHARE MY HOME OVER EXTENDED
PERIODS OF TIME IN RECENT YEARS WITH YOUNG PEOPLE FROM
OUR NATIVE CULTURES. STUDENTS STUDYING IN OTTAWA CAME
TO US TO LIVE WITH MY WIFE, MYSELF AND OUR CHILDREN.
THERE WERE CREES FROM MOOSE FACTORY, MONTAGNAIS
FROM HERMIT, SPEAKING IN THEIR OWN NATIVE TONGUE
AS WELL AS CANADA'S SECOND OFFICIAL LANGUAGE, FRENCH,
IROQUOIS FROM CAUGHNAWAGA AND A NATIVE GIRL FROM MANIWAKI
CLOSEBY. THESE EXPERIENCES WERE ENRICHING TO ME, CULTURALLY
AND IN EVERY OTHER WAY. I THANK THEM AS BROTHERS AND SISTERS
FOR SHARING THEIR LIVES WITH US. I HAVE BEEN TO WHITBORO
AND HAVE MET NATIVE PEOPLE THERE. I HOPE THAT MY COLLEAGUES
IN THE PROFESSION WILL HAVE THESE EXPERIENCES WHICH CAN
ONLY ENRICH THEIR LIVES. I HOPE THAT OUR NATIVE PEOPLE
WILL BE WILLING TO SHARE THEIR CULTURE WITH ALL CANADIANS
AND THAT TOGETHER WE CAN PROGRESS AND BUILD A BETTER WORLD
FOR ALL MANKIND.

OXFAM-Canada

Brief to

Mackenzie Valley Pipeline Inquiry

Ottawa Hearings

June 3-4, 1976.

1935

Ontario

Order to

Ontario Valley Electric Inc.

Order to

June 2-8, 1935

OXFAM-Canada appreciates this opportunity to appear before the Inquiry. One of the most critical aspects of the proposed Mackenzie Valley Pipeline is its socio-economic impact on the North. The issues raised by this aspect of the Inquiry are vital to Northerners. But, as well, they pose real development alternatives that are increasingly relevant to all Canadians. The large number of briefs which have been presented over the past several weeks as the Inquiry moves through several cities across Canada have demonstrated an intense concern among Southern Canadians for these critical issues.

OXFAM-Canada has been active during the past 10 years working with people in the Third World through long-term development projects which confront some of the immediate injustices of poverty in their daily lives. Moreover, as an active participant in the international OXFAM movement, we have had available to us a wealth of international experience gained over three decades. Through this direct involvement in the problems of development/underdevelopment, a perspective on our work has emerged which has shaped our goals and programme in developing nations and in Canada. We are convinced that this experience is directly relevant to the broader issues now before the Inquiry.

In the projects we have supported, whether in India or Bangladesh, the Andean region or with the liberation movements of Southern Africa, OXFAM has sought to work with the poorest sections of the population in both rural and urban areas. Our commitment has always been to give material assistance to their aspirations for social justice and greater equality within their own societies.

But equally important, this experience has taught us to deepen our concern for social justice with the recognition that one of the central causes of underdevelopment is the existence of indigenous and external elites who use their economic and political power to impose "development priorities" on these societies. Such priorities often strengthen the economic and social positions of these elites within developing societies at the expense of the poor and marginalized populations. In other words, the poorest of these populations, who daily face the conditions of material poverty, also lack the political power to realize their interests in a

UNION-Canada transatlantic this opportunity to appear before the inquiry
one of the most critical aspects of the proposed Mackinac Valley Project
is its socio-economic impact on the North. The issues raised by this
aspect of the inquiry are vital to the community. But, as well, they have
real development alternatives that are increasingly relevant to all
Canadians. The large number of projects which have been presented over the
past several weeks as the inquiry moves through various stages
Canada have demonstrated an intense concern among Canadians for
these critical issues.

UNION-Canada has been active during the past 10 years working with
people in the Third World through long-term development projects which
confront some of the immediate indicators of poverty in their daily lives.
However, as an active participant in the international UNICEF movement,
we have been available to us a wealth of international experience gained
over three decades. Through this direct involvement in the problem of
development/underdevelopment, a perspective on our work has emerged which
has shaped our goals and programs in developing nations and in Canada.
We are convinced that this experience is directly relevant to the inquiry
issues now before the inquiry.

In the projects we have supported, whether in India or Bangladesh, the
Andean region or with the liberation movements of Southern Africa, UNICEF
has sought to work with the poorest sections of the population in both
rural and urban areas. Our commitment has always been to give priority
assistance to their aspirations for social justice and greater equality
within their own societies.

But equally important, this experience has taught us to question our common
for social justice with the recognition that one of the central causes of
underdevelopment is the existence of indigenous and external forces who
use their economic and political power to impose "development in their
own societies. Such priorities often strengthen the economic and
social position of those allied with developing societies at the
expense of the poor and marginalized populations. In other words, the
poorest of these populations, who daily face the conditions of material
poverty, also lack the political power to realize their interests in a

more just and equitable social order.

In Bangladesh, for example, nearly half the rural population are landless or own small uneconomic plots. Unable to maintain a subsistence level of income, the poorest peasant is bound to the wealthy peasant and moneylender through increasing debt in order to purchase the grain he is unable to grow. At the same time, the control of land, agricultural labour and rural credit by the elite within Bangladesh imposes social, economic and political obstacles for a programme to redistribute land on a co-operative basis. Without redistribution of land, the landless and poor can have no secure and independent economic base to sustain them. With control over land and power resting in the hands of others, the real needs of those most oppressed - for adequate shelter, nutrition, health and education - can never be met.

By creating the conditions for relative self reliance, indigenously determined, long-term development projects may also develop the self-confidence and awareness of the oppressed to assert their longer-term interests in the national political, economic and social spheres. Along with this understanding comes the realization that any nation-wide amelioration of the conditions of poverty requires a thoroughgoing change in the social and economic structures that sustain dependency and exploitation. Development projects do not in themselves generate such structural transformations. What they can do is create the awareness of their necessity to offer a model for real alternatives. We shall demonstrate that these perspectives are directly relevant to our involvement in the Mackenzie Valley.

Closely related to the transformation in the nature and understanding of our work overseas has been the development of our programmes in Canada. Public education and political action programmes in the three

In Bangladesh, the peasants, nearly half the rural population are landless or own small pieces of land. Unable to maintain a subsistence level of income, the poorest peasant is forced to the market, selling and mortgaging through increasing debt in order to purchase the grain he is unable to grow. At the same time, the control of land, agricultural labour and rural credit by the white middle bourgeoisie means social, economic and political exploitation for a programme to reverse these trends is a cooperative basis. Without redistribution of land, the peasants and poor can have no secure and independent economic basis to sustain them. With control over land and power resting in the hands of others, the real needs of those most oppressed - the adaptive, political, nutritional, health and education - can never be met.

By creating the conditions for reflective self-reliance, the peasants, determined, long-term development projects may also develop the self-confidence and awareness of the peasants to secure their long-term interests in the national political, economic and social spheres. Along with this understanding comes the realization that any revolutionary change in the conditions of the peasants requires a revolutionary change in the social and economic structures that sustain dependency and exploitation. Development projects do not in themselves generate such structural transformations. But they can do so if there is awareness of their necessity to alter a model for rural development. The social demonstrates that these projects are directly relevant to our involvement in the peasant struggle.

Clearly related to this transformation in the nature and understanding of our work necessary has been the development of our programme in Canada. Public education and political action programmes in the three

regions of OXFAM-Canada have sought to broaden the awareness of Canadians of the dimensions and causes of poverty, malnutrition and illiteracy as well as to emphasize the importance of effecting meaningful policy changes in Canada's economic and political relationships with developing nations.

OXFAM's education and political action programmes have generated a response among Canadians not only because of a humanitarian concern but also because we feel Canadians share a common ground with those seeking social justice in the Third World. Just as powerful external economic elites have distorted development in the Third World, these same elites in the industrial nations have distorted their own economies, most prominently through the agencies of global corporations supported by large governments. As a resource hinterland for metropolitan industrial nations, this distortion has also occurred in Canada. The most obvious victims of this process of development have been Canada's native people as well as the urban and rural poor. Their situation is characterized by those same conditions of underdevelopment that we have experienced in the Third World. And it is for this reason that material and other support for these groups are consistent with OXFAM's aims and objectives.

OXFAM-Canada's involvement with Canadian native people goes back to 1970, the year in which we funded Project Talking Bird - a project involving initial organizational work in both Western and Eastern Arctic communities, especially among the Inuit. Project Talking Bird was especially useful in helping to build local affiliates of the Inuit Tapirisat of Canada (I.T.C.) in the eastern Arctic.

This initial involvement with Canada's native people in 1970 was motivated by a genuine humanitarian response to their plight, by a concern for their physical and psychological oppression. But this concern was sharpened in the years following in the awareness that the causes of poverty, hunger, malnutrition, etc., among native people in Canada were remarkably similar to the causes underlying underdevelopment in the Third World.

regions of OXAM-Canada have sought to broaden the awareness of Canadians of the dimensions and causes of poverty, malnutrition and illiteracy as well as to emphasize the importance of effective community policy changes in Canada's economic and political relationships with developing nations.

OXAM's education and political action programs have generated a response among Canadians not only because of a humanitarian concern but also because we feel Canadians share a common ground with those seeking social justice in the Third World. Just as powerful external economic forces have distorted development in the Third World, these same forces in the industrial nations have distorted their own economies, not only through the agencies of global corporations controlled by large governments, but also through the agencies of multinational industrial nations. This distortion has also occurred in Canada. The most obvious victims of this process of development have been Canada's native people as well as the urban and rural poor. Their situation is characterized by those same conditions of underdevelopment that we have experienced in the Third World. And it is for this reason that we have sought and other support for these groups are consistent with OXAM's aims and objectives.

OXAM-Canada's involvement with Canadian native people goes back to 1970, the year in which we funded Project Talking Bird - a project involving initial organizational work in both Western and Eastern Arctic communities, especially among the Inuit. Project Talking Bird was especially useful in helping to build local attitudes of the Inuit population of Canada (I.T.C.) in the eastern Arctic.

This initial involvement with Canada's native people in 1970 was motivated by a genuine humanitarian response to their plight, by a concern for their physical and psychological oppression. But this concern was sharpened in the years following in the awareness that the causes of poverty, hunger, malnutrition, etc., among native people in Canada were remarkably similar to the causes underlying underdevelopment in the Third World.

Just as the societies and economies of indigenous peoples in the Third World had been disrupted, distorted and weakened during the periods of conquest, colonialism and neo-colonialism by the intervention of the industrial countries seeking resources for their own interest, so too in Canada the appropriation of land resources by companies, governments, and individuals led to the distortion, disruption and eventual destruction of the indigenous economies and societies of Canada's native people. They were pushed aside in the process of nation-building and profit-building, sometimes exterminated, sometimes conquered, more often forced onto reserves and put under the charge of the federal government. The colonization of the Third World has had its parallel in this country. What is most unsettling, however, is that this internal colonialism directed at the native people of Canada has not ended, even in the present day.

It is in this context that OXFAM-Canada saw that its experience and policies in encouraging development among communities in the Third World were directly relevant to a similar challenge among Canadian native people. In the past two years and in response to requests from native organizations, OXFAM has again been able to give practical expression to its long-standing concern for native development in Canada, through financial and other support for native peoples' projects.

In 1974, the Indian Brotherhood of the N.W.T. approached OXFAM. They were determined to seek a land settlement in the N.W.T. different from all previous native land settlements. They sought a continuing role in both the planning and the benefits of developing their ancient northern homeland. The mechanism for ensuring themselves of a place in the future economic, social and political life of Canada's North would be continuing ownership of their land. All previous Canadian treaties with native people, up to and including the James Bay Settlement, have been instruments for extinguishing aboriginal rights to the land. The result of this extinguishment was that the dominant non-native Canadian society pushed ahead with its own kind of 'development' while native people became outcasts and pensioners.

Just as the societies and economies of indigenous peoples in the Third World had been disrupted, distorted and weakened during the century of conquest, colonialism and neo-colonialism by the intervention of the industrial countries seeking resources for their own interest, so too in Canada the appropriation of land resources by companies, governments, and individuals led to the disruption, destruction and eventual destruction of the indigenous economies and societies of Canada's native people. They were pushed aside in the process of nation-building and profit-building; resources extracted, settlements concentrated, were often forced onto reserves and put under the charge of the federal government. The colonization of the Third World has not been parallel to this country. What is most unsettling, however, is that this Indian subcontinent existed at the native people of Canada are not noted, even in the present day.

It is in this context that INDIAN CANADA sees that its experience and policies in encouraging development among communities in the Third World were directly relevant to a similar challenge among Canadian native people. In the past few years and in response to requests from native organizations, INDIAN has again been able to give priority of attention to the long-standing concern for native development in Canada, through financial and other support for native peoples' projects.

In 1975, the Indian Brotherhood of the N.W.T. approached INDIAN. They were distressed to note a land settlement in the N.W.T. different from all previous native land settlements. They sought a continuing role in both the planning and the benefits of developing their ancient northern homeland. The emphasis on securing themselves of a place in the future economic, social and political life of Canada's North would be continuing ownership of their land. All previous Canadian treaties with native peoples, up to and including the James Bay Settlement, have been instruments for extinguishing aboriginal rights to the land. The result of this extinguishment was that the dominant non-native Canadian society pushed ahead with its own kind of 'development' while native people became outsiders and passengers.

OXFAM-Canada was attracted by several aspects of this proposal put forward by the Dene people. First it was a grass roots movement --- the impetus and demand for this kind of a land settlement came from the communities. The near universal support for such an approach is shown by the response of hundreds of individuals to this Inquiry when it visits native communities.

Secondly, the Dene have made a significant breakthrough in uniting the status, non-status and Metis people of the N.W.T. In most parts of Canada 'treaty' Indians keep themselves separated from 'non-status' and Metis people. This division is promoted and encouraged by the policy of our federal government which refuses to deal with these groups as one. In the N.W.T., the Dene made it clear from the start that they sought a settlement for all people of Indian ancestry. So strongly did they make this point that the federal government agreed for the first time in modern Canadian history to negotiate with both groups together.

Thirdly and lastly, OXFAM-Canada was asked to support only those segments of the Indian Brotherhood's work which the federal government had refused to fund.

In June 1975, OXFAM agreed to a project grant of \$140,000 over a two year period to fund economic studies related to a land claim settlement in the N.W.T. Part of that grant will be used to pay for independent analysis of the economic potential of land under claim.

The largest portion will fund a series of workshops in which the Dene will develop their own concepts of community-based development. By deciding what kind of development they want, they will be able to work out the specific nature of the land settlement that would be needed to make it possible. In this way, they will be sure that development alternatives will be compatible with their own life-style and needs.

DIAM-Canada was attracted by several aspects of this proposal and response by the Indian people. First it was a grass roots movement --- the Indians and demand for this kind of a land settlement came from the community. The near universal support for such an approach is shown by the response of hundreds of individuals to this inquiry when it visits native communities.

Secondly, the Indians have made a significant breakthrough in ending the status, non-status and Métis people of the N.W.T. In many parts of Canada, First Nations have themselves separated from 'non-status' and Métis people. This division is promoted and encouraged by the policy of our Federal government which refuses to deal with these groups as one. In the N.W.T. the Indians made it clear from the start that they sought a settlement for all people of Indian ancestry. We strongly felt they make this point that the Federal government agreed for the first time in modern Canadian history to negotiate with both groups together.

Thirdly and lastly, DIAM-Canada was asked to support only those segments of the Indian Brotherhood's work which the Federal government had refused to fund.

In June 1975, DIAM agreed to a project grant of \$100,000 over a two year period to fund economic studies related to a land claim settlement in the N.W.T. Part of that grant will be used to pay for independent analysis of the economic potential of land under claim.

The largest portion will fund a series of workshops in which the Indians will develop their own concepts of community-based development. By deciding what kind of development they want, they will be able to sort out the specific nature of the land settlement that would be needed to make it possible. In this way, they will be sure that development alternatives will be compatible with their own life-style and needs.

It is our understanding that this process, which is a critical process, is now well under way within the Brotherhood. But a process by which people themselves endeavour to take control over their own lives and future is necessarily a time-consuming one. To deny the Dene the time they need is to risk serious damage to their future. The Dene position of "no pipeline before a land settlement" is surely a minimal demand which must be respected.

Consistent with OXFAM-Canada's desire to develop an educational programme around its major projects, we appointed a full-time staff member in July 1975 to act as a liaison person between OXFAM and the Indian Brotherhood of the N.W.T. The responsibility of the liaison officer has been to examine the situation in the Mackenzie Valley through direct experience in the field and to translate that understanding into an education programme for southern Canadians in the Province of Ontario. The programme began in October 1975 and continues today.

Our involvement in the Mackenzie Valley since 1974 has given OXFAM-Canada the opportunity to analyse the dynamics of development in the region and to articulate, with the benefit of our experience elsewhere, what conditions are essential if social equality and justice are to be guaranteed to the Dene of the North. An independent economic base suited to the present capacities of the native people of the Mackenzie Valley and sufficient to provide for both their present and their future development is one condition that is absolutely necessary. The second is a measure of self-determination that will allow the Dene to determine their own development priorities and that will at the same time secure their direct participation in other development decisions within the region.

Land and self-determination have existed for the Dene through most of their history and even in large measure in the present day. They continue to have a land base and the control they have had de facto over this land has allowed them to maintain their economy and the society which is built on it. Government policy and corporate activity has often weakened the integrity of their way of life, but the fact that this externally initiated

It is not understanding that this process, which is a critical process, is now well under way within the Government. But it is a process by which people themselves endeavour to take control over their own lives and future is necessarily a time-consuming one. To deny the fact that they need to take action to their future, the Government's position of "no plan for a land settlement" is surely a virtual denial which must be respected.

Consistent with OIAW-Canada's desire to develop an educational program around the major projects, we appointed a full-time staff member in July 1975 to act as a liaison person between OIAW and the Indian Brotherhood of the N.W.T. The responsibility of the liaison officer has been to examine the situation in the Mackenzie Valley through direct experience in the field and to translate that understanding into an educational program for OIAW-Canada in the Province of Ontario. The program began in October 1975 and continues today.

Our involvement in the Mackenzie Valley since 1974 has given OIAW-Canada the opportunity to witness the dynamics of development in the region and to articulate, with the benefit of our experience elsewhere, what conditions are essential to social equality and justice are to be guaranteed in the North. An independent economic base suited to the present capabilities of the native people of the Mackenzie Valley and sufficient to provide for both their present and their future development is one condition that is absolutely necessary. The second is a regime of self-determination that will allow the people to determine their own development priorities and that will at the same time respect their direct participation in other development decisions within the region.

Land and self-determination have existed for the time through most of their history and even in large measure in the present day. They continue to have a land base and the control they have had the fact that this land has allowed them to maintain their economy and the society which is built on it. Government policy and corporate activity has often weakened the integrity of their way of life, but the fact that this externally imposed

development has been, in the past, sporadic rather than comprehensive, has given the Dene the space to keep their society together and to avoid the symptoms of social disintegration that have been the fate of native people in southern Canada. Industrial training and employment programmes and government education systems have not altered the fact that the Dene have been marginalized from the development process in the Mackenzie Valley. It has been their fortune that thus far this process has not engulfed the North, that industry and government have ignored this last frontier sufficiently to leave a margin enough for the Dene to sustain themselves on their own resources.

The future holds a different prospect, however, for the conquest of the last frontier has begun. Development of northern energy reserves and exploitation of northern mineral resources threatens to erode the margin that has underwritten the Dene's survival up to now. That erosion comes in the form of direct destruction of their economic base as the wildlife, the fish, the terrain, the air, in short, the renewable resources on which they depend suffer under the environmental damage of development projects. But it also comes (and perhaps more significantly) in the form of social impacts as diverse as alcoholism, prostitution, and short-term employment that draws people away from the land and away from their communities only to throw them back there when employment opportunities dry up.

Government policy as it relates to northern native people gives no basis for hope that this process will be reversed. The mandate of the Department of Indian and Northern Affairs --- to extinguish the Dene's aboriginal title in exchange for reserves and monetary compensation --- does not offer an economic base capable of supporting Dene society. The protected lands will be too small; usufructory rights on unprotected lands will lose their value as 'development' decimates renewable resources; and monetary compensation, insufficient to begin with, will not come within an integrated development plan worked out by the Dene necessary to maximize its usefulness. Moreover, the chronic failure of government programmes,

development has been, in the past, sporadic rather than comprehensive. It has given the Dene the space to keep their society together and to avoid the symptoms of social disintegration that have been the fate of native people in southern Canada. Industrial training and employment programmes and government education systems have not altered the fact that the Dene have been marginalised from the development process in the Mackenzie Valley. It has been their fortune that for this process has not engulfed the North. That industry and government have ignored the last frontier sufficiently to leave a margin enough for the Dene to sustain themselves on their own resources.

The future holds a different prospect, however, for the conduct of the last frontier has begun. Development of northern energy reserves and exploitation of northern mineral resources threaten to erode the margin that has underwritten the Dene's survival up to now. That erosion comes in the form of direct destruction of their economic base as the oilfields, the fish, the fur, the air, the water, the renewable resources on which they depend suffer under the environmental damage of development projects. But it also comes (and perhaps more significantly) in the form of social impacts as diverse as alcoholism, prostitution, and short-term employment that drives people away from the land and away from their communities only to throw them back there when employment opportunities dry up.

Government policy as it relates to northern native people gives no basis for hope that this process will be reversed. The mandate of the Department of Indian and Northern Affairs -- to extinguish the Dene's traditional title in exchange for reserves and monetary compensation -- does not offer an economic base capable of supporting these societies. The protected lands will be too small; usufructuary rights in unprotected lands will force their value as 'development' depleted renewable resources; and monetary compensation, insufficient to begin with, will not come within an integrated development plan worked out by the Dene necessary to maintain its sustainability. Moreover, the chronic failure of government programmes,

directed at assimilating native people within the dominant, non-native society, closes off what might be an alternative source for the satisfaction of the material, if not the social and cultural needs, of the Dene. The future of the Dene under a land settlement as it is being advanced by the federal government will be little different from what is now the present-day reality for most native people in southern Canada --- unproductive reserves, emigration to the metropolitan centres; in both places welfare, alcoholism, violence, suicide, demoralization. The injustice of this situation is inescapable. The need for an alternative is clear.

A land settlement that recognizes the aboriginal title of the Dene to their traditional lands and that invests them with the power to chart their own course for the future is an alternative, consistent with the goals of social equality and justice that form the foundation of OXFAM-Canada's work. This demand by the Dene to control their own lives and to chart their own future course constitutes, we believe, the essence of the Dene Declaration and the reason why OXFAM-Canada strongly supports it. The land will provide the material base, and the self-determination will provide the institutional foundation for the Dene to meet their development needs. Without the latter, power over the lives of the Dene will continue to rest in the hands of Canadian governments which have consistently shown themselves --- whether through ignorance or insensitivity --- to be incapable of wielding power beneficially. Political rights that give the Dene control over development on an on-going basis in the Mackenzie Valley must be fundamental to any just land settlement. Without ownership of the land and of the rights to its renewable and non-renewable resources, the self-determination of the Dene will lack an economic base and will be vacuous. Both land and self-determination are important; both are necessary.

The alternatives are clear. This is not a debate about legalities, but about social justice. The history of colonialism and exploitation, whose consequences are so evident in the Third World and regrettably are also evident in the treatment of native people in Canada, must not be repeated in the Mackenzie Valley. For what this Inquiry is considering is not only the right to cultural survival of the Dene, but their material and social survival as well. As basic human rights, these must be guaranteed to them.

directed at assimilating native people within the dominant, non-native society, classes off what might be an alternative source for the satisfaction of the majority, not the social and cultural needs of the Dene. The future of the Dene under a land settlement as it is being advanced by the federal government will be little different from what is now the present-day reality for most native people in southern Canada -- unproductive reserves, migration to the metropolitan centers, in some places welfare, alcoholism, violence, suicide, desertion. The injustice of this situation is incalculable. The need for an alternative is clear.

A land settlement that recognizes the spiritual life of the Dene to their traditional lands and that invests them with the power to chart their own course for the future is an alternative, consistent with the goals of social equality and justice that form the foundation of OXAM-Canada's work. This course by the Dene to control their own lives and to chart their own future course constitutes, we believe, the essence of the Dene Declaration and the reason why OXAM-Canada strongly supports it. The land will provide the material base, and the self-determination will provide the institutional foundation for the Dene to meet their development needs. Without the latter, power over the lives of the Dene will continue to rest in the hands of Canadian governments which have consistently shown themselves -- whether through ignorance or insensitivity -- to be incapable of wielding power beneficially. Political rights that give the Dene control over development on an on-going basis in the Mackenzie Valley must be fundamental to any just land settlement. Without ownership of the land and of the rights to its renewable and non-renewable resources, the self-determination of the Dene will lack an economic base and will be useless. Both land and self-determination are important; both are necessary.

The alternatives are clear. This is not a debate about fatalities, but about social justice. The history of colonialism and exploitation, whose consequences are so evident in the Third World and repeatedly are also evident in the treatment of native people in Canada, must not be repeated in the Mackenzie Valley. For what this country is considering is not only the right to self-determination of the Dene, but the survival and growth of a new society. The Dene must be recognized as the

SUBMISSION OF THE
NATIONAL ASSOCIATION OF FRIENDSHIP CENTRES
TO THE MacKENZIE VALLEY PIPELINE INQUIRE

Mr. Commissioner,

The National Association of Friendship Centres is pleased to have this opportunity to address the Inquiry and to reaffirm our support for a just and equitable land settlement with the Dene and Inuit before major development occurs in the MacKenzie Valley Region.

We admire the stand taken by our Native Brothers and sisters in the north who have spoken out with pride, dignity and a realistic perception of future alternatives. We know they have stated their case clearly and therefore we are here not to repeat their arguments but to support them with our own experience.

The National Association represents the 70 Native Centres set up in towns and cities across Canada as well as the six provincial associations of Centres. Altogether we have 1,200 people employed in the friendship centre movement, along with a board of directorship of approximately 1,300 people.

These Centres have been set up to help cope with problems created when many people are displaced from reserves and rural communities to urban settlements. Too often this urban migration is caused by ill planned and uncontrolled development with no thought or consideration given to the environment and the inhabitants of the region.

MEMORANDUM OF THE
NATIONAL ASSOCIATION OF FRIENDSHIP CENTRES
TO THE MANITOBA VALLEY PIPELINE INQUIRY

Mr. Commissioner,

The National Association of Friendship Centres is pleased to have this opportunity to address the Inquiry and to testify our support for a just and equitable land settlement with the Dene and Inuit before major development occurs in the Mackenzie Valley region.

We share the stand taken by our Native partners and also in the north who have spoken out with pride, dignity and a realistic perception of the alternatives. We know they have acted in the best interests of their people and we are not in a position to support their arguments but to support them with our experience.

The National Association represents the 70 Native Centres set up in towns and cities across Canada as well as the six provincial associations of Centres. Altogether we have 1,500 people employed in the Friendship Centres movement, along with a board of directors of approximately 1,100 people.

These Centres have been set up to help cope with problems created when many people are displaced from reserves and rural communities to urban settlements. Too often this urban migration is caused by ill planned and uncontrolled development with no thought or consideration given to the environment and the inhabitants of the region.

The migration to the cities has increased at an alarming rate. In a period of four years twenty four new Native Centres have been established in Canada and the needs are still far from being met.

Most of our people come to the city looking for one of two things: a chance to better their economic status or a place to hide from the frustrations of reserve life.

On reserves where there is little or no economic self-sufficiency, little or no meaningful involvement in decision-making, little or no comprehension of the impenetrable bureaucracy, the self-image of Native people is very low.

So they come to the city, frequently with unrealistic expectations. In many cases, they have very little experience in coping, and they quickly fall into the poverty cycle of unemployment, depression and alcohol abuse.

The loss of culture, community, and self-identity lead to alcohol, courts, and violent deaths. The beginning of a solution must be to preserve community, culture and identity. The Dene and Inuit are seeking, are demanding the chance to both preserve and enrich their own cultures. These cultures are intrinsically based on the land. Dispossessed of their lands, they will inevitably join the thousand of displaced Native people in our urban centres. The cry is strong; Native people want to become equal participating members of Canadian society while preserving their Native heritage.

The migration to the cities has increased at an alarming rate. In a period of four years twenty four new Native Centres have been established in Canada and the needs are still far from being met.

Most of our people come to the city looking for one of two things: a chance to better their economic status or a place to hide from the frustrations of reserve life.

On reserves where there is little or no economic self-sufficiency, little or no meaningful involvement in decision-making, little or no compensation of the innumerable bureaucracy, the self-image of Native people is very low.

So they come to the city, frequently with unrealistic expectations. In many cases, they have very little experience in coping, and they quickly fall into the poverty cycle of unemployment, depression and alcohol abuse.

The loss of culture, community, and self-identity lead to alcohol, courts, and violent deaths. The desperate of a solution must be to preserve community, culture and identity. The home and land are missing, are demanding the chance to keep preserve and enrich their own cultures. These cultures are intrinsically based on the land. Deprived of their lands, they will inevitably join the thousands of displaced Native people in our urban centres. The cry is strong; Native people want to become equal participating members of Canadian society while preserving their Native heritage.

Many statistics have been compiled to indicate how serious the situation is for Native people in the cities - for people who are both physically and morally displaced. But public hearings often become a testing ground for creative use of statistical data. History or hindsight tells the truth more clearly. Every Indian and Inuit community at one time or another has experienced the oncome of unwanted or uncomprehended development. The site of Toronto, for example, was purchased from a local band for 10 shillings - can anyone suppose that these Indians understood they were selling their land, their freedom, their culture for a few shillings? It is no wonder that the Dene and Inuit will not accept a cash settlement, but want control of at least part of their traditional lands which they own by aboriginal title. They can see the tragedy of displacement and loss of culture without meaningful replacements. We as Native people and Canadian citizens cannot allow this experience to happen even one more time!

Today we are taking part in one of the most important democratic events this country has ever experienced. The federal government has created this Inquiry to allow Canadian citizens across the Nation to participate in decision-making. The federal government must be able to hear the overwhelming plea from Native and non-Native Canadians to postpone major development until land settlements have been fairly negotiated, until a creditable evaluation of oil and gas deposits has been formulated, and until environment-protection technology can cope with some of the serious threats to our North.

Many statistics have been compiled to indicate how serious the situation is for Native people in the cities - for people who are both physically and mentally displaced. But public hearings often become a testing ground for creative use of statistical data. History or hindsight calls the tune more clearly. Every Indian and Inuit community at one time or another has experienced the odour of unwanted or misunderstood development. The site of Toronto, for example, was purchased from a local band for 10 shillings - can anyone suppose that these Indians understood they were selling their land, their freedom, their culture for a few shillings? It is no wonder that the band and Inuit will not accept a cash settlement, but want control of at least part of their traditional lands which they own by aboriginal title. They can see the tragedy of displacement and loss of culture without meaningful replacement. We as Native people and Canadian citizens cannot allow this experience to happen even one time!

Today we are taking part in one of the most important democratic events this country has ever experienced. The federal government has created this industry to allow Canadian citizens across the Nation to participate in decision-making. The federal government must be able to hear the overwhelming plea from Native and non-Native Canadians to postpone major development until land settlements have been fairly negotiated, until a credible evaluation of oil and gas deposits has been formulated, and until environment-protection technology can cope with some of the serious threats to our North.

Here, at this Inquiry we have a chance to take part in the implementation of participatory democracy through a new thoughtful approach to "progress" that does not cast "development" versus environment, minority versus majority. There is room in this country for the implementation of many different types of development. Technological advance need not preclude creative development in social, economic, and political spheres.

We challenge the Canadian government to respond to this opportunity in good faith: to wait for Justice Berger's recommendations and to act on them.

This might be the last chance to begin to change an ugly (mismanaged) history into a positive future for all Canadians.

Here, at this juncture we have a chance to take part in the implementation of participatory democracy through a new thoughtful approach to "progress" that does not cast "development" versus environment, minority versus majority. There is room in this country for the implementation of many different types of development. Technological advances need not preclude creative development in social, economic, and political spheres.

We challenge the Canadian government to respond to this opportunity in good faith: to wait for Justice Berger's recommendations and to act on them.

This might be the last chance to begin to change an ugly (misnamed) history into a positive future for all Canadians.

RECEIVED
JUN 8 1976
C569

SUBMISSION
TO
MACKENZIE VALLEY PIPELINE INQUIRY
UNDER
MR. JUSTICE THOMAS R. BERGER
COMMISSIONER
AT
OTTAWA, ONTARIO
JUNE 4, 1976

RECEIVED
JUN 8 1976
FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE

Stelco is well aware of the complexities of the oil and natural gas supply/demand situation which is receiving a great deal of attention in Canada today by many parties. It is a very serious matter because it affects the future of all Canadians.

Stelco agrees with the National Energy Board contentions that domestic oil and natural gas demand will outstrip domestic supply in the foreseeable future, if the latter is dependent on current Western Canada sources alone. The options open to Canadians --

On the Supply Side are	to develop and transport natural gas
	and, eventually, oil from the
	Arctic areas
or	increase dependence upon other
	countries for oil and liquified
	natural gas.
and On the Demand Side	- conservation
	or reduction of industrial growth
	and employment opportunities.

Dependence upon other countries and reduction in industrial growth and employment opportunities are not, in our opinion, in the best interests of Canada. In Stelco's opinion, it will take a combination of both conservation and development of northern supplies of natural gas and oil in order not to drastically affect the economic base of the country.

There is no need to be afraid of the word "philosophy". It is a word which has been used for centuries to denote a certain kind of inquiry, and it is not a word which should be avoided. It is a word which should be used to denote a certain kind of inquiry, and it is not a word which should be avoided.

It is not a word which should be avoided. It is a word which should be used to denote a certain kind of inquiry, and it is not a word which should be avoided. It is a word which should be used to denote a certain kind of inquiry, and it is not a word which should be avoided.

It is not a word which should be avoided. It is a word which should be used to denote a certain kind of inquiry, and it is not a word which should be avoided. It is a word which should be used to denote a certain kind of inquiry, and it is not a word which should be avoided.

It is not a word which should be avoided. It is a word which should be used to denote a certain kind of inquiry, and it is not a word which should be avoided. It is a word which should be used to denote a certain kind of inquiry, and it is not a word which should be avoided.

It is not a word which should be avoided. It is a word which should be used to denote a certain kind of inquiry, and it is not a word which should be avoided. It is a word which should be used to denote a certain kind of inquiry, and it is not a word which should be avoided.

As a major consumer of all forms of energy, Stelco's concern about continuity of supply of natural gas has been documented with the National Energy Board. However, certain statements bear repeating.

In its Statement of Interest to the National Energy Board relevant to the Mackenzie Valley Pipeline Hearing, which was submitted on June 23, 1975, Stelco asserted that it "has an interest in supporting the principle that natural gas should be moved to markets in southern Canada by the pipeline system which will provide the lowest transportation costs." Also that "Stelco supports any proposal to move natural gas found in the Canadian Arctic to Canadian customers as expeditiously as possible."

Appearing before the National Energy Board's natural gas supply and deliverability hearings in 1974, Stelco indicated the scope of its role in serving 3,500 corporate customers situated in Canada from coast to coast. In 1975 terms, Stelco produced about 40% of Canada's total steel output or about 5.4 million tons. Stelco's personnel numbered 23,200 whose engagement involved outlays of \$402,000,000. In 1975, its expenditures for goods, supplies and services with 7,500 suppliers was \$602,000,000. Natural gas purchases averaged 63 million cubic feet per day or about 23 billion cubic feet during the year. The gas was furnished by Canada's six major distributors from Alberta to Quebec.

Stelco's use of natural gas began in a major way in 1958, at Hamilton. By 1962 Western natural gas was in use in blast furnace, open hearth, annealing, galvanizing, forming and finishing operations. Entire process units were designed to use natural gas exclusively and cannot function on any other readily available energy source.

The clean burning qualities of natural gas are of environmental significance to communities in which industrial plants are situated. Natural gas enables Stelco to meet present provincial government environmental standards applicable to the emission of deleterious substances. Since 1960, Stelco has spent or committed \$197,000,000 for capital equipment for adherence to environmental standards and it foresees additional capital outlays for this purpose. Use of natural gas provides an essential contribution unmatched by any other energy source to the continued realization of environmental standards. Natural gas is therefore vitally important to Stelco.

Metallurgical coal is the source of 68% of Stelco's total energy needs. Natural gas is the source of 21%, refined petroleum provides 6% and 5% is supplied by electrical power. About one-third of all natural gas employed by Stelco is devoted to processes which are not adaptable to alternate energy sources.

The United States is the source of nearly all the 3,500,000 tons of metallurgical coal which Stelco employs annually. Stelco is endeavouring to reduce this dependence on outside sources by utilizing Nova Scotia and Western coal for its future needs but this development will take place over a number of years. The U.S. is also the source of the bulk of the steam coal which is employed in electrical power generation in Ontario. If domestic supplies of oil and gas are allowed to diminish, it can be readily seen that Stelco would be even more dependent on imports for its energy needs. Natural gas from Arctic regions offers a viable solution to counteract this trend.

Much is spoken and written about the early benefits to be expected from energy developed from solar and geothermal sources and from synthetic fuels. The United States Federal Energy Administration has cautioned that country thus:-

"Solar, geothermal and synthetic fuels will make only a small contribution to domestic energy supplies by 1985.

The major contribution from solar, geothermal and synthetic fuels will not be felt until after 1990"

Stelco agrees that a reduction in energy demand growth can be achieved in Canada through an aggressive approach to conservation by all parties. The magnitude of these savings will increase over the next decade, but in Stelco's opinion will not be sufficient to prevent curtailment of industrial growth and thus new jobs, or serious balance of trade problems for the country.

Canada's steel industry has been and will continue to be in the forefront of energy conservation.

Stelco, Algoma, Dofasco, Sidbec and Sysco have formed the Ferrous . Industry Energy Research Association, slanted toward energy research and efficiency. At the Second Federal Conference on Industrial Energy Conservation, F.E.R.A. and a number of other industrial associations pledged themselves toward attainment of energy conservation goals.

In its submission, F.E.R.A. stated in part:-

"The reputation of FERA companies for fuel efficiency is well-known in the world's steelmaking fraternity. Because iron must be extracted from its ore and because all steel processing must be done at ultra-high temperatures, the production of raw steel is energy intensive. As Canada's total steel production rises to meet forecasted growth in demand, the total energy required will increase. Conservation will favourable influence the extent of the increase."

"The FERA companies have a long history of energy conservation motivated by awareness that energy accounts for a substantial portion of the cost of doing business. They are committed to energy conservation in recognition of its being sound business and, as well, careful management of non-renewable natural resources.

The first of these is the fact that the...

of the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

the...

"FERA's members unhesitatingly endorse and support government endeavours directed toward energy conservation. They are confident that, given government-industry co-operation in word and action, tangible energy advantages to all Canadians are attainable."

In addition to the foregoing on the supply and demand situation, some comments on the matter of steel pipe supply are appropriate. Concern has been expressed to this Inquiry as to whether Canada has the capability to furnish the steel pipe necessary for the construction of a large diameter, natural gas pipeline from the Arctic to markets in southern Canada. These concerns are understandable and deserve responses. However, as Canada's largest steelmaker and pipemaker, Stelco does not share these concerns.

The Canadian steel industry, particularly its basic producers, has substantial expansion programs underway. Stelco, as an example, will increase its production capacity by 1.35 million tons when its new steel plant at Nanticoke on Lake Erie comes on stream. Approximately 1,000 construction tradesmen are at work on the site. It is, therefore, Stelco's contention that enough basic steel will be available from Canadian sources to prevent any disruption in the normal supply of steel products to the Canadian market.

1. The first part of the paper is devoted to a general discussion of the problem of the existence of a solution of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the system has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied.

2. In the second part of the paper, the problem of the existence of a solution of the system of equations (1) for arbitrary values of the parameters α and β is solved. It is shown that the system has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. The solution is found in explicit form.

3. In the third part of the paper, the problem of the existence of a solution of the system of equations (1) for arbitrary values of the parameters α and β is solved. It is shown that the system has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. The solution is found in explicit form.

Stelco holds senior ranking amid North America's foremost pipemakers. It is known in the natural gas and oil transmission industry as a major producer of quality steel line pipe. Stelco-made steel line pipe is to be found in many of that industry's pipeline systems in both Canada and the United States. Stelco has an established and proven record of integrated quality content.

As to the availability of large diameter pipe, Stelco has placed in operation a new ultra modern mill capable of producing steel pipe up to 60" in diameter and wall thicknesses up to 1-1/8" from steel made to meet specifications designed for Arctic service. Stelco is convinced that, from experience, the daily output from this mill will be adequate to provide Canadian content in excess of 50% in any Northern pipeline project. More specific detail with regard to specifications, supply and timing will, no doubt, be key considerations in the deliberations of the National Energy Board.

Stelco would, however, at this time indicate that in the design of its new mill major considerations were given to the achievement of extremely high standards of product quality. A highly efficient test and inspection system occupies almost a third of the mill building. Modern ultrasonic and x-ray testing methods are applied. A brochure attached to this submission outlines this facility and its product in more detail.

Stelco is confident that it is fully capable of discharging those responsibilities which may be awarded to it in connection with any forthcoming northern natural gas transportation system.

These results indicate that the system is a valuable tool for

the study of the system and its components in a variety of

conditions of operation and that the system is a valuable

tool for the study of the system and its components in a

variety of conditions of operation and that the system is a

valuable tool for the study of the system and its components

in a variety of conditions of operation and that the system is

a valuable tool for the study of the system and its components

in a variety of conditions of operation and that the system is

a valuable tool for the study of the system and its components

in a variety of conditions of operation and that the system is

a valuable tool for the study of the system and its components

in a variety of conditions of operation and that the system is

a valuable tool for the study of the system and its components

in a variety of conditions of operation and that the system is

a valuable tool for the study of the system and its components

in a variety of conditions of operation and that the system is

a valuable tool for the study of the system and its components

in a variety of conditions of operation and that the system is

a valuable tool for the study of the system and its components

in a variety of conditions of operation and that the system is

a valuable tool for the study of the system and its components

in a variety of conditions of operation and that the system is

a valuable tool for the study of the system and its components

In conclusion Stelco, with its long history of involvement in the development of natural resources and in constructing large projects, is convinced that capabilities and appropriate attitudes exist among Canadians which will allow for the achievement of a project such as the Mackenzie Valley Pipeline in a manner that will be socially, environmentally and economically acceptable to all Canadians no matter where they reside.

Toronto, Ontario

June 4, 1976

It is a very old and famous city, and it is the capital of the country. The city is very beautiful and has many interesting places to visit. The people are very friendly and the food is very good. The climate is very pleasant and the scenery is very beautiful. The city is a very important center of commerce and industry. It is a very modern city and has many new buildings and roads. The city is a very attractive place to live and visit.

Thank you very much.

Yours faithfully,

Introduction.....	page 1
Possible community changes.....	3
Technical and environmental considerations.....	5
Some comments on the capital costs section.....	13
Conclusions.....	17

A

CRITIQUE

OF THE

TRANSPORTATION CORRIDOR STUDY

DONE BY

THE GAS ARCTIC SYSTEMS STUDY GROUP

AND BY

THE CANADIAN NATIONAL RAILWAYS

IN 1971

ON THE MacKENZIE VALLEY

BY: Kai Reitan
P. O. Box 168, Station A
Ottawa, Ontario K1N 8V2

written in March, 1973

CHITTOOR

OF THE

TRANSPORTATION STUDY

WORK BY

THE CANADIAN NATIONAL RAILWAYS

AND BY

THE CANADIAN NATIONAL RAILWAYS

IN 1971

ON THE MONTREAL VALLEY

Y. O. Box 188, Station A
Ottawa, Ontario K1A 8V2

Written in March, 1973

TABLE OF CONTENTS

Introduction.....	page 1
Possible community changes.....	3
Technical and environmental considerations.....	8
Some comments on the capital costs section.....	13
Conclusion.....	17

* * * * *

A CRITIQUE OF THE TRANSPORTATION CORRIDOR STUDY,
FINAL REPORT, SUMMARY (VOLUME I), PHYSICAL
DESCRIPTION -- TECHNICAL CONSIDERATIONS (VOLUME II), &
COST ESTIMATES AND ECONOMIC IMPACT (VOLUME III), BY
PEMCAN SERVICES FOR THE GAS ARCTIC SYSTEMS STUDY GROUP
AND OF
MACKENZIE VALLEY, PRELIMINARY RAILWAY ROUTE STUDY,
BY THE CANADIAN NATIONAL RAILWAYS.

* * * * *

PREFACE

The material found in this Study is obviously at least two years old. From speaking with men who are currently working on this project (and who do not wish to be named), it appears that much new data has been found or has been researched. However, this data has yet to be put together, and is not, even in part, available except to those who are directly working on some aspect of the newer studies. The author was told that the Transportation Corridor will be presented to the federal Energy Board this summer. If they decide in favour of the scheme, as it stands then, the project will go ahead. If not, it will not.

INTRODUCTION

It should be stated at the outset that because this type of Transportation Corridor has never before been attempted in such magnitude, that many of the figures and facts presented both in the Reports and by the author, can only be "educated guesses" -- nothing more. From some experience in Alaska, with Morrison-Knudsen (at one time the world's largest construction company in roads, highways, bridges, etc.) in the accounting department, the author has found that estimates given by engineers tend to reflect the fondest desires of their own hearts, and not necessarily do they take into account the facts at hand. These engineers are not deliberately trying to deceive, not usually, but it must be remembered that they too are only human, and therefore subject to the same human errors as are the rest of us.

Generally, engineering errors can be attributed to the overlooking of some fact that seems minor at the time, but which turns out to be of major importance as the work begins. Other normal errors occur in estimating the geology of the area to be traversed. Usually this comes about through hasty surveying of some one section of the route -- assuming that it is more or less correlated to some other section which it resembles closely, and which has already been thoroughly surveyed -- when the unpleasant surprise is discovered that this particular section has it's own difficult peculiarities, and that none of these, or only some of them, were foreseen. Frantic manoeuvring then takes place to make up for this oversight. These manoeuvres are what cause gross cost increases in new ventures such as the MacKenzie Valley Transportation Corridor that will be discussed on the following pages.

A good look at the cost sheets of any construction company's books from only one project, and a comparison of these figures with the engineers' original estimates, piece by piece, will bear out the above statements. The author wishes

It should be stated at the outset that the purpose of this type of investigation is not to determine whether or not a hypothesis is true, but to determine whether or not it is possible to test the hypothesis. The hypothesis is presented in the form of a statement which can be tested by the method of the experiment. The hypothesis is not a statement of fact, but a statement of a possible relationship between two or more variables. The hypothesis is tested by the method of the experiment, and the results of the experiment are compared with the hypothesis. If the results of the experiment are in agreement with the hypothesis, the hypothesis is accepted. If the results of the experiment are in disagreement with the hypothesis, the hypothesis is rejected. The hypothesis is not a statement of fact, but a statement of a possible relationship between two or more variables. The hypothesis is tested by the method of the experiment, and the results of the experiment are compared with the hypothesis. If the results of the experiment are in agreement with the hypothesis, the hypothesis is accepted. If the results of the experiment are in disagreement with the hypothesis, the hypothesis is rejected.

Generally, engineering errors can be attributed to the overlooking of some fact which seems minor at the time, but which turns out to be of major importance as the work begins. Other typical errors occur in estimating the weight of the steel to be fabricated. Usually this is done by using a weight surveying of some size, section of the steel - assuming that it is more or less related to some other section, which is reasonable enough, and which has already been determined. When the unpleasant surprise is discovered, this particular section has its own difficulties, and this and that none of them, or only some of them, were taken into consideration. These errors are what cause the most serious and costly mistakes in the fabrication of the steel.

A good look at the past history of the construction company's books from only one project, and a comparison of these figures with the engineer's original estimates, will place, will bear out the above statements. The author wishes

that she had at hand the cost sheets she had to prepare on a project completed by Morrison-Knudsen on St. Lawrence Island in the Bering Straights, at a site called Savoonga (the name of the nearest Eskimo village). During the time of this project, wage rates for this type of work, and particularly for this style of isolation, skyrocketed. The amenities seemingly deserved by the men subjected to this isolation, in the view of their individual unions, also skyrocketed -- meaning that suddenly M-K was put in the position of having to hire a DC3 (the smallest plane allowed to fly over that portion of the Bering Straights) to fly in a load of fresh lettuce and tomatoes for the salad-starved men who had threatened a mini-mutiny unless this request was complied with. The cost of the round trip of the DC3 was \$2,000. per trip. Several trips were made in just one season. That particular incident was only a minor case. The costs of long-distance telephone calls for men unable to see their families at regular intervals were \$20,000. per month, or more. Yet, Savoonga was considered a relatively small job. The MacKenzie Valley Corridor cannot be considered small, in any light.

"Deserve" mutuality -

It is here also suggested that cost data from the building of the Alaska Railroad, primarily from Anchorage to Fairbanks, be procured from the United States Department of the Interior in Washington, D.C. That railroad also cuts across tundra of a sort, muskeg, ^{and} wide and swift-running rivers with their continuing ^{el} problem of ice-breakup every spring -- in other words, the problems encountered there will have some correlation with the problems to be encountered in the MacKenzie Valley. Our Canadian engineers could well use this to check out their own figures, always keeping in mind that cost ratios are now very different. The figures shown for every year of upkeep, from completion date to the present, would, or should, be most interesting to our own engineers.

POSSIBLE COMMUNITY CHANGES

Quoting from the Transportation Corridor Study, Final Report, Summary, Volume I, page 1-34, we read under the sub-heading of Government Services:

A Transportation Corridor would have a significant impact on all three levels of government. The inflow of southern construction workers, the possible establishment of a district headquarters at Fort Simpson and a major operating center for pipelines at Norman Wells will increase the demand for government services. Improvement in community services, community development planning, educational facilities and housing will be required. In addition, increased staff will be necessary to monitor the environment, protect the game resources and handle the increased transportation activity. The corridor development may require an allocation of costs between the government and the potential users.

Some implications from the above statement alone are appalling. For instance, the use of the phrase "inflow of southern construction workers" appears a bit ominous to those who envision the hiring of northern workers -- particularly of native men who know the terrain so well already, and who live there and who would be a stabilising influence on the communities as a whole over the long run. I believe that some account must be taken as to the effect that these immigrant construction workers would bring as opposed to the sociological and psychological benefits to be derived from the almost exclusive hiring of northern workers, with many native men being among them. *On page 1-25, of Volume I, it is mentioned that six crews will be needed consisting of 150 men each, plus their attendant suppliers.*

Anyone who has ever lived in a northern construction camp, as has this author, and who has made it a point to get to know the local people, can relate the debilitating effects of a large group of men being brought into an isolated community -- one that already has it's own mores and customs, and that is many miles away from any form of law. The pace becomes furious. Most, if not all, morals are suspended for the duration. The dignity of individuals ceases to be important. Local husbands, and fathers of daughters, are

considered to be "selfish" with their women if they do not care to abide by the mores and customs of these newcomers. They are "old-fashioned", and therefore the women are looked upon as objects to be "liberated" from these outmoded customs. This liberation can take many forms, and usually does.

Inflation begins to run rampant in the community. A ^{cafe} breakfast, for instance, will increase in price from \$2.00 to \$5.00 per plate, for the identically same items on that plate. The cost of liquor jumps, usually tripling in price. If there was a small bar in the area, it is suddenly and swiftly enlarged, and just a quickly it's hours are expanded to remain open until 5:00 AM (rather than the old midnight closing hour).

The local men, oftentimes native, will be allowed to run errands or do manual labour for the newcomers on a piecemeal basis, and thus are forced to "toady" to their "betters". The locals will occasionally act as guides for hunting expeditions, for which they are paid in liquor rather than in cash. It is not uncommon to find a native man asleep in the road the morning after he has been paid in this manner. Their wives thus become guardians of the family, as well as guardians of their husbands. Respect for the father in his own home deteriorates rapidly. It must be here noted that in most native families that have not yet been tainted with this type of life described above, the fathers of the families are highly respected and have the leading role in keeping the whole group alive from one year to the next. Sons grow up wanting to emulate their fathers; daughters grow up submissive to them; wives have a secondary role to their husbands. With the influx of this large contingent of men from outside the community, all of these roles are changed -- some are irrevocably reversed.

Again, in the quotation mentioned above, one may note all of the new government services that will

considered to be "selfish" with their money if they do not
come to abide by the rules and customs of these new nations.
They are "old-fashioned", and therefore the money and looked
upon as objects to be "liberated" from their outmoded customs.
This liberation can take many forms, and usually does.

Inflation begins to re-emerge in the economy.
A breakfast, for instance, will increase in price from \$1.00
to \$2.00 per plate. For the breakfast now there is a
plate. The cost of 1/2 cup of food, usually served in plates.
If there was a small one in the area, it is suddenly not

any longer, and just a quickly it's gone and replaced
by another one. Until \$1.00 is reached from the old value
of \$2.00.

The final form of inflation will be a
re-emergence of the money value for the money in a
physical form, and thus the form of "money" is
"better". The dollar will eventually be no longer for
having anything, for which they are paid in money.

It is not necessary to find a
man who is the best of the world after he has been told
in this manner. Their value then become greater of the
world, as well as a guarantee of their happiness.
For the father to his own happiness rapidly, it
will be better than that the most native families have

but yet been raised with this type of life described
above, the value of the families are highly respected
and their leading role in the world. The world grows
from one year to the next. From growing rapidly, it
their fathers' happiness grows up and grows to their
have a happiness role in their happiness. The father

of this happiness, it is not only the happiness
all of these roles are changed—there are things
reversed.
It is not only the happiness, but the
happiness in the world is changed, and the
happiness of the world is changed, and the

surely be required. Please note the phrase "increased staff will be necessary to monitor the environment". Monitor the environment from who? It certainly seems that the Gas Arctic Systems Study Group is hereby serving notice that we will forever after have to keep watch over them to see that they don't botch up our environment. Some mention of cracked pipelines and spillage will be referred to below.

It is elsewhere noted in Volume I that many beaver dams will be disturbed by merely the original construction, to say nothing of the wildlife that will be permanently disturbed by this new Corridor and its upkeep, -- which will continue as long as the oil in the Arctic holds out. Several government ecology experts will be needed, both for the animals, and for the plant life -- which will, in places, be massively disturbed. These ecologists will be hired at government expense -- in other words, the taxpayers will pay once again.

New schools will have to be built -- and staffed -- for the children of the migrant construction workers who are allowed to bring their families with them. Naturally, these schools must be paid for by one government or another. At the present time, Edmontonians are aghast at the costs of building schools in suburbs for just one generation of children. How about the costs of building schools, or bringing in trailer units and hooking them up to ^{the} utilities so dear to the hearts of western society and keeping those utilities from freezing in the winter months, for only a span of two years, or at the most three? It can be presumed that the companies who will own the proposed pipelines will furnish the housing for their workers, but again the government will have to furnish housing for all these new government employees that must be hired.

Most isolated northern communities seem to be able to exist quite nicely without the "amenities" of our typical western civilisation, but one cannot expect

imported workers to agree to these conditions, nor can we expect government workers to make due without piped-in fuel oil (or gas), without electricity, without running hot and cold water, and without a place to buy ^{a variety of} groceries with some degree of regularity. Maintenance men for all of these pipes and lines, running to each home, must be on hand. Having spent two years in Alaska, the author can recount tales of fuel lines frozen at -35° , and of toilets being frozen, and broken, by the time the lines were defrosted. At this point, the toilet had to be replaced, which took three days to order and install. By then, the propane line to the cooking unit had burst -- but the fuel line held. In retrospect, this seems like a Marx Brothers comedy, but when actually going on, the ramifications are horrendous. Frankly, it was easier to live in a log cabin, aged 50 years, with a creek past the front door that flowed from the glaciers on Mt. McKinley (our running water), and with dependable gas lanterns, than it was to live in the comparative "civilisation" of the beautiful, large trailer where everything went wrong in threes. Granted, this speaks from a woman's point of view, but it's highly doubtful that even a temporary community will exist without at least some women, even if only the supervisors' wives. Then, too, the usual procedure for construction companies bringing only men into northern isolated areas is to cart in large "bunkhouse" trailers, large "shower and washing facility" trailers, huge ones for dining halls, one for a kitchen, and 2 or 3 for the toilet facilities. The men try to provide their own off-hours recreation in these bunkhouses. They tend to fall prey to "cabin fever" rather quickly in a milieu of this type. Again, all trailers must have heat, light, and hot and cold running water. It appears that the Gas Arctic Group has glossed roughly over these facts of life in the north.

The bald statement that "The corridor development may require an allocation of costs between the government and the potential users" strongly indicates that they fully expect us, the taxpayers, to again help them provide services that only they require. It has been my experience that the

imported waters to agree to these conditions. Now and
we expect Government workers to take the same position
that old (and) without effect. Without effect
hot and cold water, and without a place to stay.
with some degree of regularity. The situation is not all
of these pipes and lines, leading to each house and to
on hand. Having spent two years in Alaska, the author has
recently taken of local lines frozen at 15°, and of course
being frozen, and broken, by the time the lines were
restored. At this point, the writer has to be realistic,
which does three days to order and install. By then, the
problem lies in the coating and the water is not the same
line. In respect, this seems like a waste of money
now, but when actually going by the conditions are
horrendous. Finally, it was easier to live in a log cabin
and 20 years, with a cross path, the right door, the right
from the elevator on the building (for convenience), and
with dependence on the system, which is not to live in the
concrete "activation" of the building. In fact, the
where everything was in order. However, this system
from a woman's point of view, but it's highly convenient that
even a temporary community will exist without at least some
water, even if only the temporary water. Then, the two
usual procedure for construction companies building only one
into northern isolated areas is to start in large "temporary"
buildings, large "showers and washing facilities" installed. In
one for dining hall, one for a kitchen, and one for the
toilet facilities. The men try to provide their own other
restroom in these buildings. They tend to tell you to
"wash later" rather than "wash in a sink of this type". Again,
all facilities must have heat, light, and hot and cold running
water. It appears that the old Arctic Group has planned
temporarily over these facilities in the north.
The said statement that the construction equipment
may require an allocation of funds between the Government
and the potential users, strongly indicates that they really
expect the taxpayer, to again help them provide services
that only they require. It has been my experience that the

services once installed are exceedingly difficult to transfer to the people already there, once the construction company pulls out. This happens frequently because the camps are generally situated closer to the site being currently worked on than they are to the community where they could be utilised at a later date. For instance, on the M-K project called "Cantwell" in Alaska, the actual camp site was situated 28 miles from the small Tanana Indian village of Cantwell. Thus, two complete sets of utilities had to be set up, with eager white entrepreneurs moving into the Indian community and happily building rickety ~~XXXXXXXXXX~~ halls to serve as "hotels", bars, and cafes -- all with grossly exaggerated prices -- for the duration.

Perhaps a greater study should be made of the long run effects that will inevitably take place in the Canadian communities involved -- a study done not by the very companies who wish to intrude, but rather done by a private or governmental group which cannot be "bought off". Good things can come of the MacKenzie Valley Corridor, but so can bad come from the building of it. Planning in depth must be done, not just a willy-nilly acceptance of any terms offered -- seen with the light of dollar-signs in our eyes. (See Section VI, Part II, Volume III for more details)

Questions need to be asked: such as, who will own the utilities?, who will clean up the ~~desecration~~ ^{desecration} and mess afterwards?, at whose expense?, who pays for all the new services to be offered?, who builds and staffs the schools?, will northern men be hired and trained, on the job?, will they also be employed for the long haul, for the maintenance of the pipelines and roads?, how will their women be treated?, and who will enforce all this? Companies who arrive to do this building on our land, to bring out our irreplaceable resources, through our settlements and communities, need to be aware of something that we Canadians tend to take for granted -- something called "responsibility". We cannot and must not assume that their intentions are honourable. For these companies operate by the edict of dollars and cents, not usually by what is good for some God-forsaken part of the world they happen to be interested in at the moment.

TECHNICAL AND ENVIRONMENTAL CONSIDERATIONS

In the Preface of Volume I (page i), it is clearly stated that the chief reason behind the building of pipelines down the MacKenzie Valley will be to supply the U.S. market. The Report in question seeks only to justify this basic premise and to consolidate the building of the pipelines with the building of roads, and/or a railroad, in the same Corridor in order to cut the original expense and to service these pipelines.

Several different types of roads are considered: i.e., four types ranging from only support roads for the pipeline crews (that are only useable during "good" weather) to all-weather, all-season roads suitable for trucking and for tourists. These roads would consist of one main trunk line, with several shoots going off to the sites of various things connected with the maintenance and running of the pipelines over several years. In the Conclusion of the Report, it can be seen that Pemcan Services have concluded that only an all-weather, all-season road will do, and also have concluded that a railroad is not feasible at this time. Pemcan Services are the engineers hired by Alberta Gas Trunk Line Company Limited and Canadian National Railways to investigate "the technical and economic advantages of constructing several modes of transportation, either simultaneously or in sequence, in the Mackenzie Valley". Please note that Pemcan was hired only to investigate the advantages -- not the disadvantages -- of such a corridor. Very few, if any, of their statements can possibly be viewed as even indicating that there might be such disadvantages, to the building of the Transportation Corridor, per se.

Two points immediately stand out in reading Pemcan's section on the Geology of the region to be traversed. One is that only 255 holes were drilled, and then only to a depth of 20 feet each -- this is less than one hole per mile of the route along its entire length. The other point is that statements are made regarding the

is the Preface of Volume 1 (page 1), it is clearly stated that the chief reason behind the building of pipelines down the Mackenzie Valley will be to supply the U.S. market. The report is question marks only as to the feasibility of this main premise and to demonstrate the building of the pipelines with the building of roads, roads a railroad, to the same extent in order to not only reduce expenses and to service these pipelines.

Several different types of roads are considered:
1. Four types ranging from only experimental for the pipeline areas (that are only possible during "good" weather) to all-weather, all-season roads suitable for traveling and for transport. These roads would consist of one main trunk line, with several branches going off to the areas of interest. This connected with the maintenance and working of the pipelines over several years. In the Commission of the Report, it can be seen that Roman Services have concluded that only an all-weather, all-season road will do, and also have concluded that a railroad is not feasible at this time. Roman Services are the engineers hired by Alberta Gas Transmission Company Limited and Canadian National Railways to investigate "the technical and economic advantages of constructing several modes of transportation, either simultaneously or in sequence, in the Mackenzie Valley. Please note that Roman was hired only to investigate the advantages -- not the disadvantages -- of each a comparison. Very few, if any, of their statements can possibly be signed as even indicating that there might be such disadvantages to the building of the Transportation Corridor, for as the points immediately stand out, is road building. Roman's section on the Geology of the region to be traversed. One is that only 555 holes were drilled, and then only to a depth of 50 feet each -- this is less than one hole per mile of the route along the entire journey. The other point is that statements are made concerning

water drainage along this route, with the rather off-hand comments being that generally it is poor. One must remember that this is in a region of discontinuous permafrost, where in the southern area the earth constantly freezes and then thaws again, and in the northern area it is continuously, more or less, frozen. Again, having lived and worked in Alaska in this same type of climate, the author is extremely apprehensive about whether sufficient plans have been made to take care of the spring breakup and the terrific problems of water runoff that always attend this season of the year.

In the North, spring thaws are times of terror and immobility for those who live there. The earth becomes as a giant sponge, swallowing everything that does not sit on thick layers of gravel. Even these thick layers are themselves eventually swallowed -- in one year, or two, or even three -- depending on their depth and the type of soil under them and how the drainage is in that particular spot. Roads built on this spongy, slippery soil must have many, many times the layers of gravel for a base than would be used for roads, say, in the Edmonton area. Tales are told of a huge "cat" being parked one night, but in the morning it was gone. Thieves were suspected, but no one could go anywhere to hide it in that country. After a lengthy search, one man began to probe the earth with a slim steel rod, and hit metal below. Other "cats" were brought in, to rescue the swallowed one. This appears, at first telling, to be just another typical tall northern story, however, the cost sheets for this project did show this incident. Perhaps it was one grand hoax by the men in the field -- but then again, perhaps it was authentic.

These heavily layered roads, built high and wide with the best gravel, at completion were to be left in what would normally be called an unfinished state for five years. This was to give the maintenance crews a chance to observe exactly what the convolutions of the earth would bring, along every foot of the road, over five springs. Oftimes, holes would appear overnight large enough to swallow a pickup truck. If the fine gravel was withheld

water drainage along this route, with the rather off-hand
conclusion being that generally it is good. The next

remember that this is in a region of high mountainous country,
where in the southern section the water generally flows and
then flows again, and in the northern area it is continuous,
more or less, from. Again, having lived and worked in
Alaska in this same type of climate, the author is extremely
apprehensive about whether sufficient drainage has been made
to take care of the spring flooding and the possible problems
of water runoff that might attend this season of the year.

In the report, nothing was said of factors
and possibility for those who live there. The author has
as a general impression, something that does not fit
on this layer of gravel. Even more, this layer is
themselves eventually washed away in the year, for the
even three - depending on their depth and the time of
soil under them and how the drainage is in their particular
spot. Roads built on this gravel, especially, will have
sinks, and then the layers of gravel for a long time would
be used for roads, and in the drainage area, this is
kind of a "hugely" being packed and built, for in the
morning it was found. The area was surrounded, but the way
could go anywhere to find it in that country. After a
lengthy search, the area was found to be a high
along steel rail, and the steel rail, being "packed" into
brought in, to remove the gravel and the gravel, as
first telling, to be just another typical rail road
story, however, the next question, this gravel, the gravel
this incident. Perhaps it was not found, but the
in the field - but then again, gravel is not dangerous.

These heavily packed roads, built right and left
with the best gravel, at least, it seems to be left by
that would normally be raised at a high level, for five
years. This would give the maintenance, and a means to
improve, exactly that the organization of the earth would
bring along every foot of the road, over five years.
Others, before could be seen, especially, for years, in
a single place, such as the gravel was visible

for this period then relatively few pieces of heavy equipment would be needed to fix these holes as they appeared. The earth twists and turns; hills slide into the valleys -- ever so slowly, but the road goes along with them; water oozes up from the ground in huge quantities and carries parts of the roadbed with it as it seeks a lower level; the ground thaws at differing rates, within a few feet, and heaves up whole sections of the roadbed high into the air, leaving gaps in this ribbon of gravel that cuts through the muskeg. Maintenance costs will undoubtedly be higher, or as high, as the original costs of construction over a period of several years. Who will pay for this? Will these repairs be done for the convenience of everyone or only for the convenience of the pipeline companies?

What will happen to the two pipelines, filled with fuel, one heated and one refrigerated, when the ground begins its convolutions every spring? This heaving and sinking can easily be likened to the effects of an earthquake disaster. Yet what measures will the pipeline companies take to prevent the breaking or twisting of their pipelines? They speak of permanent camps with men to monitor the lines, and of shut-off valves spaced very far apart. What will happen to all the oil, or gas, that lies between the breaks that will be inevitable and the proposed valves? What if something should occur to distract the small monitoring crew in just one section at the precise time of a break?

The Report speaks knowingly of different types of gravel to be found along the proposed route, but buried in among this data is another off-hand remark that most of this gravel is moderately to highly susceptible to frost. On page 1-3 of Volume I, it reads: "Granular materials are not common and are unevenly distributed; they contain little or no silt or clay sizes and are relatively unaffected by frost action." Page 1-4 continues: "Granular soils are most suitable for use as fill, but less satisfactory materials classed here as 'mixed grain size soils' can probably be used more economically with appropriate modifications to design or construction practice."

For this period then relatively few pieces of heavy
equipment would be needed to fix these holes as they
appeared. The earth was not turned into
the surface - even so slowly, but the road goes along with
them; water comes up from the ground in some quantities
and carries parts of the roadbed with it as it seeks a lower
level. The ground then at different rates, within a few
feet, rises up where sections of the roadbed high into
the air leaving gaps in this ribbon of earth that runs
through the masses. Many more costs will undoubtedly
be higher, as we have, for the original costs of construction
over a period of several years. Who will pay for this?
Will these people be doing it? The consequences of everyone
or only for the convenience of the public is uncertain.

What will happen to the two principles: filling
with fuel, one heated and one refrigerated, when the ground
begins its convulsions every spring? This heating and
cooling can easily be fitted to the effects of an earthquake
disaster. But what measures will the private companies
take to prevent the breaking or collapse of their pipelines?
They speak of permanent camps with gas to monitor the lines,
and of shut-off valves spaced every few feet. What will
happen to all the oil, or gas, that lies between the breaks
that will be inevitable and the proposed valves? What if
something should occur to disturb the earth's surface
now in just one section at the proper time of a quake?

The Report speaks knowledge of different types
of gravel to be found along the proposed routes, but points
in many cases to a further off-hand report that gravel
this gravel is adequately so - slightly susceptible to frost.
On page 1-5 of Volume I, it states: "The gravel-sandstone and
not enough and are heavily disturbed, they contain little
or no clay, silt and are relatively unaltered by
frost action." Page 1-6 continues: "In many cases the gravel
suitable for use as fill, but less satisfactory as aggregate
because of its high grain size which can possibly be
used more expensively with aggregate for highway building
design or construction practice."

Not being an engineer, I will not attempt to debate the issue. But being a layperson who has driven over many of these roads over a number of years, I can mention one incident in particular. A 226 mile road was constructed between Anchorage and Homer (on the tip of the Kenai Peninsula) by a rival construction company -- one not so picky about the gravel they used as we always were. Our company was building up a spit out into the Bay at Homer, so I had several occasions to drive this stretch. The most memorable drive took place just three days after the construction company "sold" the completed job to the state of Alaska. It took me 32 hours, five flat tires, and many forays into the muskeg itself to avoid holes which had appeared in those three days that would have neatly hidden a gravel truck -- not just a pickup. I had with me the Chief Information Officer of the state, a friend coming down for a visit, who was so appalled at the condition of this "new" road that she saw to it that this was made one of the prime election issues in the forthcoming campaign. The ~~XXXX~~ chief reason for all the roadbed problems was that fine gravel had been used where very coarse to coarse should have been hauled in. (An interesting sidelight to that election: the Governor who had allowed this to occur lost by a slight margin, when he was thought to be a shoo-in). This fine gravel is merely washed away by the fierce action of water, and is not heavy enough to give a solid base when situated on shifting earth. It can be piled high and wide and deep, but the eventual action more closely resembles that of a sandy beach than of solid rock.

In conclusion, it would seem that there are still too many unknowns regarding the terrain, the climate, and geotechnical conditions along the route (page 1-24) to allow for this Corridor's hasty construction. The designs have not even been fully worked out for the pipelines. Yet, on page 1-25, it is blithely stated that the road could be finished in one and one-half years of all season work, this for a 365 mile all-weather gravel surface road with all its attendant bridges over rushing water.

Not being an engineer, I will not attempt to debate the
issue. But being a layperson who has driven over many of
these roads over a number of years, I can mention one
incident in particular. A 200 mile road was constructed
between Anchorage and Homer (on the tip of the Kenai
Peninsula) by a (very) construction company -- one of
the ones about the gravel they used as we always hear
the company was building up a reputation for the way it
Homer, as I had several occasions to drive this stretch.
The road memorialized the fact that the gravel was
the construction company "said" the gravel had to be
state of Alaska. It took 30 hours, 1000 tons of gravel,
and many tons of gravel into the gravel pits to avoid delays
which had happened in those three days that would have
nearly killed a gravel truck -- not just a gravel truck,
but with me the Chief Information Officer of the state.
A friend coming down for a visit, who was so surprised at
the condition of this road, asked that and was so surprised
this was one of the prime election roads in the
forthcoming campaign. The KENAI chief reason for this
the gravel problem was that this gravel had been tested
which was necessary to ensure gravel had been tested
(an interesting addition to that election, the gravel
Homer who had allowed this to occur took by a slight
margin, when he was thought to be a shoo-in. This
fine gravel is merely washed away by the force of water,
of water, and is not heavy enough to give a solid base
when situated on shifting earth. It can be piled high
and wide and deep, but the eventual action was clearly
resemblance that of a sandy beach than of solid rock.

In conclusion, it would seem that there are
still too many unknowns regarding the terrain, the climate,
and geological conditions along the route (page 1-24)
to allow for this Governor's hasty construction. The
designs have not even been fully worked out for the
highway. Yet, on page 1-25, it is briefly stated that
the road could be finished in one and one-half years at
all known work. This for a 365 mile all-weather gravel
surface road with all its attendant bridges over rushing
water.

These engineers must be eternal optimists to not have seen or mentioned the great natural barriers and phenomena that regularly occur in the Far North. Man, and his ways, are insignificant by comparison to mountains, rocks, muskeg, tundra, and the mighty rivers that must be crossed. Mosquitos alone can drive a man mad in the summer, to say nothing of ~~XXX~~ black flies and others of the insect world. Continual darkness in the winter months eats at one's sanity continuously. Spring becomes a mixed blessing -- it is welcomed for the light it brings, but thoroughly despised for the immobility it imposes. Autumn is perhaps the best for it's harvest time for berries, the sun is still there (but waning), and the work pace is frantic to complete what must be done before snow covers the whole.

Of course, some sections of this new roadway are going to be easier to construct than are other sections, but this doesn't negate the duty and responsibility to plan well for those areas that will be especially difficult. Northern countries all around the world have run into our same problems -- sometimes in little bits and pieces -- but have we bothered to consult them about their successes and failures? Or don't we feel that we need to learn from others?

These engineers must be eternal optimists to

not have seen or mentioned the great natural barriers and
phenomena that regularly occur in the far North. Now, and
his way, the impassable by comparison to the mountains, rocks,
rivers, and the mighty rivers that must be crossed.
Kopet-dagh alone can drive a man mad in the summer, to say
nothing of the black flies and swarms of the insect world.
Continued darkness in the winter - the cold is not
easily controllable. During summer a wind blowing
it is welcomed for the light is better, but throughout
designed for the intensity of the light. Autumn is perhaps
the best for its pleasant light for garden, and the
still there (not wanted), and the water here is terrible,
to describe what must be done before snow covers the whole.

Of course, some sections of this country
are going to be easier to conquer than are other sections,
but this doesn't negate the fact and responsibility to
plan well for those areas that will be extremely difficult.
Northern countries all around the world have two main
problems - sometimes in the high and places - but
have no solution to conquer them about their success and
failure? Or don't we feel that we need to learn from
others?

There are many things that we can learn from
others. We can learn from their successes and failures.
We can learn from their experiences and their knowledge.
We can learn from their mistakes and their triumphs.
We can learn from their wisdom and their folly.
We can learn from their strength and their weakness.
We can learn from their courage and their fear.
We can learn from their hope and their despair.
We can learn from their love and their hate.
We can learn from their joy and their sorrow.
We can learn from their life and their death.

SOME COMMENTS ON THE CAPITAL COSTS SECTION

From personal interviews with some officials and persons acting as consultants to the groups planning this Corridor, it seems that this Study, completed in 1971, is now grossly out-of-date. Many specific items have been changed, indeed, many of the basic premises have also changed. It appears that now the Canadian Federal Government will be footing the bill for an all-weather road, and that the pipeline companies are only interested in building a low-cost winter road. On pages 1-17 and 1-18 of Volume III, in looking at the charts drawn up by the companies, one can readily see why. The total cost of the road they would like (i.e., a Group 1 - All Weather Road, located down slope from the pipelines to catch any oil spills that may occur) would be \$31,416,000 -- 341 miles @ \$92,130 per mile as an average, while the road they are now prepared to build (Group 4 - Winter Road, only passable during very cold weather and then with the proper vehicles) will have a total cost of \$2,040,000, or for 340 miles, an average cost of \$6,000 per mile. The difference between two million dollars and 31½ million dollars can be readily seen by even the most naive person. Already we are into what could be called the fifth concentric circle -- federal government investment -- in what should be initially an investment on the part of private enterprise. We're back to the old Canadian problem of private enterprise enjoying the benefits, but with the public taking the risks.

As mentioned earlier in this paper, evidently the pipeline companies see nothing at all wrong with this attitude, as shown when they blithely mention that there will have to be some allocation of costs between the companies and all three levels of government bodies. Back to the concentric circle idea, again, #1 -- private enterprise -- will be built for our non-renewable resources (if the oil and gas are to eventually come out of the Canadian North also). I can find no mention made as to the royalties that will be paid for these resources. If it is buried in these thick tomes someplace, then undoubtedly that too is one of the items that will have been changed by now.

SOME COMMENTS ON THE DAVIES COSTS SECTION

From personal interviews with some officials and persons acting as consultants to the Energy Planning Board, it seems that this study, completed in 1971, is now largely out-of-date. Many specific items have been changed. Indeed, many of the basic premises have also changed. It appears that now the Canadian Federal Government will be looking the bill for an all-weather road, and that the pipeline companies are only interested in building a low-cost winter road. On pages 1-17 and 1-18 of Volume I, in looking at the market based on the assumption that the results are why. The total cost of the road was \$1.12 (i.e., a 50% increase). All weather road, located from 1970 to 1975, the pipeline to match the oil pipeline that was built would be \$11,125,000 -- \$11,125,000. The cost of the road was \$11,125,000. While the road was now expected to be built in 1975, after road only possible during very cold weather in 1970. With the proper vehicles will save a total cost of \$1,000,000, or 10% of the cost. An average cost of \$1,000 per mile. The difference between two million dollars and \$10 million dollars can be readily seen by even the most naive person. Already we are into what would be called the 1975 economic crisis -- Federal Government's investment -- in what should be initially an investment on the part of private enterprise. We're back to the old Canadian problem of private enterprise enjoying the benefits, but with the public paying the bills. As mentioned earlier in this paper, evidently the pipeline companies are not acting at all wrong with this attitude as shown when they rightly mention that they will have to be some allocation of costs between the companies and all three levels of government bodies. Back to the economic crisis idea, again. It is private enterprise -- all the bills for our non-renewable resources (i.e., oil and gas) are to eventually come out of the Canadian people's pocket. Can find no mention made as to the possibility that will be paid for these resources. It is in fact in 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 2948, 2949, 2950, 2951, 2952, 2953, 2954, 2955, 2956, 2957, 2958, 2959, 2960, 2961, 2962, 2963, 2964, 2965, 2966, 2967, 2968, 2969, 2970, 2971, 2972, 2973, 2974, 2975, 2976, 2977, 2978, 2979, 2980, 2981, 2982, 2983, 2984, 2985, 2986, 2987, 2988, 2989, 2990, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 2999, 3000, 3001, 3002, 3003, 3004, 3005, 3006, 3007, 3008, 3009, 3010, 3011, 3012, 3013, 3014, 3015, 3016, 3017, 3018, 3019, 3020, 3021, 3022, 3023, 3024, 3025, 3026, 3027, 3028, 3029, 3030, 3031, 3032, 3033, 3034, 3035, 3036, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3044, 3045, 3046, 3047, 3048, 3049, 3050, 3051, 3052, 3053, 3054, 3055, 3056, 3057, 3058, 3059, 3060, 3061, 3062, 3063, 3064, 3065, 3066, 3067, 3068, 3069, 3070, 3071, 3072, 3073, 3074, 3075, 3076, 3077, 3078, 3079, 3080, 3081, 3082, 3083, 3084, 3085, 3086, 3087, 3088, 3089, 3090, 3091, 3092, 3093, 3094, 3095, 3096, 3097, 3098, 3099, 3100, 3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108, 3109, 3110, 3111, 3112, 3113, 3114, 3115, 3116, 3117, 3118, 3119, 3120, 3121, 3122, 3123, 3124, 3125, 3126, 3127, 3128, 3129, 3130, 3131, 3132, 3133, 3134, 3135, 3136, 3137, 3138, 3139, 3140, 3141, 3142, 3143, 3144, 3145, 3146, 3147, 3148, 3149, 3150, 3151, 3152, 3153, 3154, 3155, 3156, 3157, 3158, 3159, 3160, 3161, 3162, 3163, 3164, 3165, 3166, 3167, 3168, 3169, 3170, 3171, 3172, 3173, 3174, 3175, 3176, 3177, 3178, 3179, 3180, 3181, 3182, 3183, 3184, 3185, 3186, 3187, 3188, 3189, 3190, 3191, 3192, 3193, 3194, 3195, 3196, 3197, 3198, 3199, 3200, 3201, 3202, 3203, 3204, 3205, 3206, 3207, 3208, 3209, 3210, 3211, 3212, 3213, 3214, 3215, 3216, 3217, 3218, 3219, 3220, 3221, 3222, 3223, 3224, 3225, 3226, 3227, 3228, 3229, 3230, 3231, 3232, 3233, 3234, 3235, 3236, 3237, 3238, 3239, 3240, 3241, 3242, 3243, 3244, 3245, 3246, 3247, 3248, 3249, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3283, 3284, 3285, 3286, 3287, 3288, 3289, 3290, 3291, 3292, 3293, 3294, 3295, 3296, 3297, 3298, 3299, 3300, 3301, 3302, 3303, 3304, 3305, 3306, 3307, 3308, 3309, 3310, 3311, 3312, 3313, 3314, 3315, 3316, 3317, 3318, 3319, 3320, 3321, 3322, 3323, 3324, 3325, 3326, 3327, 3328, 3329, 3330, 3331, 3332, 3333, 3334, 3335, 3336, 3337, 3338, 3339, 3340, 3341, 3342, 3343, 3344, 3345, 3346, 3347, 3348, 3349, 3350, 3351, 3352, 3353, 3354, 3355, 3356, 3357, 3358, 3359, 3360, 3361, 3362, 3363, 3364, 3365, 3366, 3367, 3368, 3369, 3370, 3371, 3372, 3373, 3374, 3375, 3376, 3377, 3378, 3379, 3380, 3381, 3382, 3383, 3384, 3385, 3386, 3387, 3388, 3389, 3390, 3391, 3392, 3393, 3394, 3395, 3396, 3397, 3398, 3399, 3400, 3401, 3402, 3403, 3404, 3405, 3406, 3407, 3408, 3409, 3410, 3411, 3412, 3413, 3414, 3415, 3416, 3417, 3418, 3419, 3420, 3421, 3422, 3423, 3424, 3425, 3426, 3427, 3428, 3429, 3430, 3431, 3432, 3433, 3434, 3435, 3436, 3437, 3438, 3439, 3440, 3441, 3442, 3443, 3444, 3445, 3446, 3447, 3448, 3449, 3450, 3451, 3452, 3453, 3454, 3455, 3456, 3457, 3458, 3459, 3460, 3461, 3462, 3463, 3464, 3465, 3466, 3467, 3468, 3469, 3470, 3471, 3472, 3473, 3474, 3475, 3476, 3477, 3478, 3479, 3480, 3481, 3482, 3483, 3484, 3485, 3486, 3487, 3488, 3489, 3490, 3491, 3492, 3493, 3494, 3495, 3496, 3497, 3498, 3499, 3500, 3501, 3502, 3503, 3504, 3505, 3506, 3507, 3508, 3509, 3510, 3511, 3512, 3513, 3514, 3515, 3516, 3517, 3518, 3519, 3520, 3521, 3522, 3523, 3524, 3525, 3526, 3527, 3528, 3529, 3530, 3531, 3532, 3533, 3534, 3535, 3536, 3537, 3538, 3539, 3540, 3541, 3542, 3543, 3544, 3545, 3546, 3547, 3548, 3549, 3550, 3551, 3552, 3553, 3554, 3555, 3556, 3557, 3558, 3559, 3560, 3561, 3562, 3563, 3564, 3565, 3566, 3567, 3568, 3569, 3570, 3571, 3572, 3573, 3574, 3575, 3576, 3577, 3578, 3579, 3580, 3581, 3582, 3583, 3584, 3585, 3586, 3587, 3588, 3589, 3590, 3591, 3592, 3593, 3594, 3595, 3596, 3597, 3598, 3599, 3600, 3601, 3602, 3603, 3604, 3605, 3606, 3607, 3608, 3609, 3610, 3611, 3612, 3613, 3614, 3615, 3616, 3617, 3618, 3619, 3620, 3621, 3622, 3623, 3624, 3625, 3626, 3627, 3628, 3629, 3630, 3631, 3632, 3633, 3634, 3635, 3636, 3637, 3638, 3639, 3640, 3641, 3642, 3643, 3644, 3645, 3646, 3647, 3648, 3649, 3650, 3651, 3652, 3653, 3654, 3655, 3656, 3657, 3658, 3659, 3660, 3661, 3662, 3663, 3664, 3665, 3666, 3667, 3668, 3669, 3670, 3671, 3672, 3673, 3674, 3675, 3676, 3677, 3678, 3679, 3680, 3681, 3682, 3683, 3684, 3685, 3686, 3687, 3688, 3689, 3690, 3691, 3692, 3693, 3694, 3695, 3696, 3697, 3698, 3699, 3700, 3701, 3702, 3703, 3704, 3705, 3706, 3707, 3708, 3709, 3710, 3711, 3712, 3713, 3714, 3715, 3716, 3717, 3718, 3719, 3720, 3721, 3722, 3723, 3724, 3725, 3726, 3727, 3728, 3729, 3730, 3731, 3732, 3733, 3734, 3735, 3736, 3737, 3738, 3739, 3740, 3741, 3742, 3743, 3744, 3745, 3746, 3747, 3748, 3749, 3750, 3751, 3752, 3753, 3754, 3755, 3756, 3757, 3758, 3759, 3760, 3761, 3762, 3763, 3764, 3765, 3766, 3767, 3768, 3769, 3770, 3771, 3772, 3773, 3774, 3775, 3776, 3777, 3778, 3779, 3780, 3781, 3782, 3783, 3784, 3785, 3786, 3787, 3788, 3789, 3790, 3791, 3792, 3793, 3794, 3795, 3796, 3797, 3798, 3799, 3800, 3801, 3802, 3803, 3804, 3805, 3806, 3807, 3808, 3809, 3810, 3811, 3812, 3813, 3814, 3815, 3816, 3817, 3818, 3819, 3820, 3821, 3822, 3823, 3824, 3825, 3826, 3827, 3828, 3829, 3830, 3831, 3832, 3833, 3834, 3835, 3836, 3837, 3838, 3839, 3840, 3841, 3842, 3843, 3844, 3845, 3846, 3847, 3848, 3849, 3850, 3851, 3852, 3853, 3854, 3855, 3856, 3857, 3858, 3859, 3860, 3861, 3862, 3863, 3864, 3865, 3866, 3867, 3868, 3869, 3870, 3871, 3872, 3873, 3874, 3875, 3876, 3877, 3878, 3879, 3880, 3881, 3882, 3883, 3884, 3885, 3886, 3887, 3888, 3889, 3890, 3891, 3892, 3893, 3894, 3895, 3896, 3897, 3898, 3899, 3900, 3901, 3902, 3903, 3904, 3905, 3906, 3907, 3908, 3909, 3910, 3911, 3912, 3913, 3914, 3915, 3916, 3917, 3918, 3919, 3920, 3921, 3922, 3923, 3924, 3925, 3926, 3927, 3928, 3929, 3930, 3931, 3932, 3933, 3934, 3935, 3936, 3937, 3938, 3939, 3940

Pages 1-19 to 1-24 of Volume III delve into parts of the nitty-gritty of building the several different kinds of roadways proposed. It should be noted that the "clear and grub" per mile figures for Group 1 roads are just about equal to the total cost figures for Group 4 roads. The analogy can probably be made that the Group 4 roads will merely be bull-dozed trails across whatever terrain happens to be there.

It should also be well noted that a mere 10% of the total estimated cost for each section that is being allowed as the "contingency fund" -- for any and all emergencies that may arise -- can hardly be called good planning, for this type of terrain, and for this type of weather. It has been my experience that many times the normal amount of emergencies arise when something is being built in rough terrain, in an isolated area (where supply lines are long and hazardous), and where the weather is always a major factor to be dealt with and usually fought (weather in the north cannot by any stretch of the imagination be called "benevolent"). This contingency fund can well be wiped out with one major emergency, or with a series of little problems -- encountered at the beginning of each section, just in getting the bugs out of the thing.

On page 1-29, items 4) and 5) state that no costs have been included for the operation of any ferries (yet the costs of building them are included), nor are any costs included for highway maintenance (which is here stated to be estimated at about \$3,000 per mile per year. Obviously, it is intended that the Canadian governments will take care of these items.

The all weather road (Group 1) seems to be badly needed by the pipeline companies in order for them to save millions of dollars on the construction of the pipelines alone (see pp. 1-51 and 1-74), yet from verbal comments received within the last few days, it seems that these very companies are now unwilling to build and pay for the good road they themselves want to have.

part of the fifty-fifty of building the second district
kind of roadway proposed. It should be noted that the
"first and second" are with the first group of roads and
about equal to the total cost of the first group of roads.
The analogy can probably be made that the Group 2 roads
will surely be built before the second group of roads
because of the first.

It should also be well noted that a group of
of the first district road has been decided that the first
allowed as the "second group of roads" -- to any and all
elements that may arise -- can be built as well as the
district. For this type of road, the first group of
roads. It has been by experience that the first group of
roads of the first district road has been decided that the first
road in each district is to be built first. There is no
line and the first road, and where the road is
always a major road to be built first and usually the
(which is the first road by any section of the first district
be called "second group of roads" -- to any and all
road with one major road, or with a group of
little roads -- encountered at the beginning of each
section, just by getting the first out of the first.

On page 1-13, item 1) and 2) state that the
roads have been decided for the first group of roads
(the first of building the first group of roads). The first
roads decided for the first group of roads is the first
road to be built first. It is intended that the first group of roads
will take care of these roads.

The all-weather road (item 1) which is the
highly needed by the piping company is given for the
to give millions of dollars in the construction of the
piping along line 1-13 and 1-14, and then the
construction within the first few days. It says that
these very companies are now unwilling to build and pay
for the first road they constructed with to have.

Moving on to the Gemini North section (Part II) of Volume III entitled The Regional Economic Impact of Transportation Corridor, one notes the high percentage of native men among the labour force along with the high percentage of native families living in the towns along the proposed route. These men generally do not own and operate small construction firms, nor could they be called "local contractors". Thus, there is little hope that they will benefit from the short-term construction phase of this project -- as they will not be able to offer their services to the big contractors, except in the labour force. A comment is made that it is to be hoped that the temporary inflation that will inevitably occur during construction will not adversely affect those people living in the region. It is hard to envision inflation coming into an area, and only be^{ing} applied to some of the people, and not to all who are there.

A quote from paragraph 9.2 sums up much of what has been said above:

The study region encompasses a small and fragile economy. There are few adventures in the wilderness within its borders, and its population could be comfortably accommodated over a few city blocks in a southern city. The present level of services is low or, in cases, non-existent and sharp permanent increases in demand in most sectors are unlikely; once a certain minimum level of services is achieved, it takes a long time for demand to grow to the point where additional services are required.

In this economic microcosm, any change has an impact far exceeding its relative magnitude. Once set, patterns are not easily changed. In the high cost northern economy, mistakes are not easily rectified. In many cases the social benefits outweigh the economic ones; a small cafe at Fort Norman may generate more benefits as a recreation centre for the community than as a supplier of food services for winter road truckers. The road may do more for the north by reducing northerners' traditional isolation than by affecting transport costs.

Gemini North goes on to urge very careful planning in all areas, if the north and its people are really to benefit.

Because this study deems the proposed railroad to be far too costly to construct, it seems superfluous to

...Moving on to the Central North section (Part II)
of Volume II entitled The Regional Economic Impact of
Transportation Corridor, one notes the high percentage of
native and foreign labor force along with the high
percentage of native families living in the towns along
the proposed route. These are generally on their own and
operate small construction firms, but would they be called
"local contractors". Then, there is little hope that they
will benefit from the short-term construction phase of
this project -- as they will not be able to offer their
services to the big contractors, except in the labor
force. A comment is made that it is to be hoped that the
temporary facilities that will inevitably come during
construction will not adversely affect those people living
in the region. It is hard to envision facilities coming
into an area, and only be applied to some of the people,
and not to all who are there.

A quote from paragraph 2.2 runs up with it
what has been said above.
The study region encompasses a small and fragile
economy. There are few advantages in the wilderness
within its borders, and its population would be
comfortably accommodated over a few city blocks in a
southern city. The present level of services is low
or, in cases, non-existent and basic permanent
improvements in demand in some sectors are unlikely;
once a certain minimum level of services is achieved,
it takes a long time for demand to grow in the sector
where additional services are required.
In this economic situation, any change has an
impact far exceeding the relative magnitude. Thus
but, patterns are not easily changed. In the high
cost northern economy, this area is not easily
modified. In many cases the social benefits outweigh
the economic ones; a small cost at first seems but
generates more benefits as a reputation builds for
the community than as a supplier of food services
for other food services. The trend may be more for
the north or southern markets, traditional
isolated than by affecting transport costs.

Central North goes on to urge very careful planning in all
areas, if the north and its people are really to benefit.

because this study shows the proposed railroad to
be far too costly to construct, it seems superfluous to

discuss here, except for the comments about the difficulties of permafrost. Because the roads will cover the same terrain, along almost the same route as was designated for the railroad, the question might be asked as to why the roads will not have the same difficulties? On pages 19 and 20 of Part III, Volume III, discussion is given about a Major Problem Area. This deals with the fact that part of the roadway (Corridor) lies in areas of discontinuous permafrost, while the northern portions should have continuous permafrost. Attempts will have to be made on the one hand to preserve, and on the other to degrade it. Then there is the vast "gray region" inbetween -- and what is to be done with that? New techniques of preserving permafrost have just been found, but now they will need testing (perhaps this is a good place to begin the tests). In the discontinuous permafrost regions -- by far the greatest section -- is where the constant freezing, and thawing, and heaving that was mentioned in earlier sections of this paper will have the most drastic effects. The problem still exists, and will for many years to come. It may never be solved, and this road may always have to undergo major maintenance costs for as long as people wish it to remain a road.

Chinese have, except for the movement about the difficulties
of government. Because the roads will cover the same terrain,
along almost the same route as was designated for the
railroad, the question might be asked as to why the roads
will not have the same difficulties? On pages 19 and 20
of Part III, Volume II, discussion is given about a
Major Problem Area. This deals with the fact that part
of the roadway (Corridor) lies in areas of discontinuous
government, while the northern portions should have
continuous government. Attention will have to be made on
the one hand to government, and on the other to develop it.
Then there is the vast "gray region" between and what
is to be done with that? The responsibility of organizing
government has just been found, and now they will need
action (because this is a good place to begin the study).
In the discontinuous government region -- by far the
greatest section -- is where the constant fighting, and
chaos, and nothing that can be done in any real sense
of this paper will have the most drastic effects. The
problem will exist, and will for many years to come.
It may never be solved, and this road may always have to
undergo major maintenance costs for as long as people wish
it to remain a road.

CONCLUSION

In conclusion, I would like to merely ask some questions:

Who will own the pipeline?

Which market will it serve first, in case of conflict?

Who will pay for maintenance of the line?

of the Corridor?

of the roads?

Who will clean up the mess left after construction?

Who will clean up any spillage, and how fast, and how thoroughly?

Who will be the construction workers?

any natives among them?

perhaps on a percentage basis?

hired and trained on the job?

Who will bring law and order, and keep it?

Will women be honoured, or pawned?

and who gives their word on this?

and who will enforce it?

What about the inevitable inflation?

how will the local people exist on their low

cash incomes during this period of construction?

could one member, at least, of every family there

already be hired for the construction time?

Where will the money come from for all the increased

government services to be needed?

What about the ecology of the region?

are the investigators being "bought off" by

the multinational corporations?

Who is doing the careful planning?

from all angles?

And the big question between the governments and these multinational corporations should be:

Are we selling our resources down the road, or are

we really going to get in royalties what they

are worth, internationally, today?

CONCLUSION

In conclusion, I would like to merely say some

who will own the pipeline?

Which market will it serve first, in case of conflict?

Who will pay the maintenance of the line?

At the country?

At the country?

Who will clean up the mess after construction?

Who will clean up environmental damage, the new line, and

how thoroughly?

Who will be the construction contractor?

Any native money spent?

Perhaps on a permanent basis?

Hired and trained on the job?

Who will bring the oil out, and how?

Will anyone be harmed, or poisoned?

Will the lines their work be safe?

And who will enforce it?

What about the inevitable resistance?

How will the local people react on their job?

Much income during the period of construction?

Could some money, at least, be used to help them?

Already be hired for the construction time?

Where will the money come from for all the proposed

government services to be needed?

What about the ecology of the region?

Are the investors taking "brown oil" or

the ecological consequences?

Who is doing the careful planning?

How will energy?

And the question between the government and these

environmental organizations should be

Are we building our resources down the road, or are

we really going to see in the future that there

are some irremediable things?



Our big energy rip-off

We behave as though there was no bottom to the barrel. We act as though we're sitting on an ocean of oil and when that gives out we'll start in on our tar sands. We take pride in our inexhaustible riches of minerals, forests, water and land. What a jolt it was then, when last winter we suddenly realized that the U.S. was facing a very real shortage of fuel oil, and if we didn't keep a watchful eye on our exports we might suffer a shortage too.

There is a bottom to the barrel after all, and it's a lot closer than we like to think.

The U.S. and Canada are by far the biggest consumers of energy and resources in the world. A table in the Statistical Yearbook of the United States compares two interesting facts about Canada and the U.S. and twelve other developed nations. The United States and Canada consume, per capita, almost twice as much energy (oil, coal, water power etc.) as the twelve other developed nations. But we rank second last (the U.S.) and last (Canada) in cultural development in the number of books we produce per million population compared to these same countries.

Out of this comes an unlovely image of people on this continent racing around in cars, speed boats, campers, snowmobiles and producing and consuming all kinds of goods and spewing out trails of ugly garbage at the rate of five pounds per person per day.

Lately the U.S. has been making noises about a "continental policy" for resources. Individual Canadians on a recent CBC radio show were adamant that we were going to keep our riches for ourselves.

But is that kind of dog-in-the-manger stand good enough?

We should be planning right now for the future. Disaster is inevitable if we go on as we have in the past — building pipelines, damming rivers with almost no regard for the life-style of native people, wildlife or ecology. And there's an equally good argument to be made for cleaning up the messes we are making right now — and which will only grow bigger in the future.

Two years ago we were greatly concerned about pollution. All kinds of citizens groups were organized, talk went on at provincial and federal levels about what could be done. Some action was taken — and the urgency of the issue seemed to die down.

But most Canadian cities and towns are still burning garbage in old-fashioned, air-polluting incinerators — or burning and burying it in city dumps. We have known for years that the most efficient, nonpolluting method is to recycle garbage. Why aren't we, then, building recycling units like the ones West Germany and Sweden have? Why aren't we separating our garbage, right now, into coded bags so that glass, cans and paper can be reused by industry?

And does it make sense to fill the air with more and more noise — or are we calmly waiting to go deaf?

Is September 1975 the earliest the U.S. can start on its part of the Great Lakes Water Quality Agreement, which will clean up the Great Lakes?

Isn't it time to call a halt to unnecessary packaging within packaging?

And time to enforce the laws we now have on our statute books to fine those people who insist on pitching garbage around?

Companies that continue to foul up the atmosphere with belching smoke, and spew poisons into rivers and lakes must be fined until they stop.

Until we make it clear to government — provincial and federal — that we are concerned, as a people, about the big clean-up of this country, nothing will be done. It's abundantly clear right now we can't go on gobbling up our resources and spewing out more garbage, gunk, and smoke and sewage at the rate we've been doing. If we do go on as we have in the past, we'll end up a swampland surrounded by garbage fill. Whatever else is disposable, the future of this country surely is not.

Doris Anderson, Editor

A few comments partially on this subject. Perhaps our whole way of life needs to be looked at, and reevaluated. Do we really need a pipeline? Or were we hoping to get a road out of it, but now we won't, but now the dollars look good. We are supposedly a thinking people. Let us cease to bury our heads in the sand (or muskeg) and take a good hard look at just what it is we're proposing to do -- to OUR land, to OUR people, and to OUR way of life!

x x x x x x x x

← From the April, 1973 Chatelaine, Vol. 46, No. 4., page 1.



Our big energy rip-off

We believe as strongly as anyone that we are entitled to the energy we need to live. We believe that energy is a basic right, and that it should be available to all at a reasonable cost. We believe that the government has a responsibility to ensure that energy is produced and distributed in a way that is fair and equitable to all citizens.

There is a danger in the energy industry, and it is a danger that we must all be aware of. The energy industry is a powerful force, and it has the potential to shape the future of our country. But it also has the potential to exploit us, and to take away our energy rights. We must be vigilant, and we must stand up for our rights.

The U.S. and Canada are the two largest energy-consuming nations in the world. We are also the two largest energy-producing nations. This gives us a unique position, and it gives us a unique responsibility. We must ensure that our energy resources are used in a way that is sustainable, and that they are distributed in a way that is fair and equitable to all citizens.

One of the most important ways that we can ensure that our energy resources are used in a sustainable way is by investing in renewable energy. Renewable energy is energy that comes from natural resources that are replenished over time. Examples of renewable energy include wind, solar, and hydroelectric power. Investing in renewable energy can help us reduce our dependence on fossil fuels, and it can help us create a more sustainable future for ourselves and for our children.

Another important way that we can ensure that our energy resources are used in a sustainable way is by improving energy efficiency. Energy efficiency is the process of using less energy to do the same amount of work. Examples of energy efficiency include using energy-efficient light bulbs, using energy-efficient appliances, and using energy-efficient buildings. Improving energy efficiency can help us reduce our energy consumption, and it can help us save money on our energy bills.

Finally, we must ensure that our energy resources are distributed in a way that is fair and equitable to all citizens. This means that we must ensure that everyone has access to energy, and that everyone can afford to pay for energy. We must also ensure that the benefits of energy production are shared by all citizens, and not just by a few wealthy individuals or corporations.

These are the three most important ways that we can ensure that our energy resources are used in a sustainable way. We must all work together to ensure that we are doing everything that we can to protect our energy rights, and to create a more sustainable future for ourselves and for our children.

We must also be aware of the fact that the energy industry is a powerful force, and it has the potential to shape the future of our country. But it also has the potential to exploit us, and to take away our energy rights. We must be vigilant, and we must stand up for our rights.

The U.S. and Canada are the two largest energy-consuming nations in the world. We are also the two largest energy-producing nations. This gives us a unique position, and it gives us a unique responsibility. We must ensure that our energy resources are used in a way that is sustainable, and that they are distributed in a way that is fair and equitable to all citizens.

One of the most important ways that we can ensure that our energy resources are used in a sustainable way is by investing in renewable energy. Renewable energy is energy that comes from natural resources that are replenished over time. Examples of renewable energy include wind, solar, and hydroelectric power. Investing in renewable energy can help us reduce our dependence on fossil fuels, and it can help us create a more sustainable future for ourselves and for our children.

Another important way that we can ensure that our energy resources are used in a sustainable way is by improving energy efficiency. Energy efficiency is the process of using less energy to do the same amount of work. Examples of energy efficiency include using energy-efficient light bulbs, using energy-efficient appliances, and using energy-efficient buildings. Improving energy efficiency can help us reduce our energy consumption, and it can help us save money on our energy bills.

Finally, we must ensure that our energy resources are distributed in a way that is fair and equitable to all citizens. This means that we must ensure that everyone has access to energy, and that everyone can afford to pay for energy. We must also ensure that the benefits of energy production are shared by all citizens, and not just by a few wealthy individuals or corporations.

These are the three most important ways that we can ensure that our energy resources are used in a sustainable way. We must all work together to ensure that we are doing everything that we can to protect our energy rights, and to create a more sustainable future for ourselves and for our children.

A few comments
partially on
this subject.
Perhaps our
whole way of
life needs to
be looked at,
and reevaluated.
Do we really
need a big energy
rip-off?
We were not
paying for gas
a good bit of
it, but now we
want it, but how
the dollars
look good. We
are supposedly
a civilized
people, but we
cannot do anything
but look at
just what it
is we're pro-
posing to do --
to cut back, to
cut people, and
to cut away at
the way of
life.

From the April,
1973 Chronicle,
Vol. 56, No. 4,
page 1.

SUBMISSION
TO
THE BERGER COMMISSION HEARINGS
ON
THE MACKENZIE VALLEY PIPELINE.

BY
"TEN THOUSAND DAYS" OF OTTAWA.

Ottawa, June 4, 1976.

1042

SUBMISSION
TO
THE ENGINE COMMISSION HEARINGS
ON
THE MAGNETIC VEHICLE FIXTURE

BY
"TEN THOUSAND BAY" OF OTTAWA

Ottawa, June 4, 1970

Mr. Commissioner,

We welcome the opportunity to speak to this inquiry concerning the "social, environmental and economic impact" of the proposed Mackenzie Valley Pipeline.

Ten Thousand Days is the name of an Ottawa inter-church group affiliated nationally with Ten Days for World Development, which has focussed chiefly on the needs of people in the developing countries - the Third World. Over the past few years, we have become more aware, that we are the descendants of exploiters. We now realize, undoubtedly much less than we should, that the talents and insights of the peoples now governing new nations in Africa and Asia, as well as those of the Native Peoples in Canada, have been ignored for centuries. Unless we change our attitudes, we shall follow the patterns of colonial regimes and continue to deny basic rights to the first citizens of Canada. The legal battles preceding the settlement of the Inuit and the Indians in the James Bay area, the

Mr. Commissioner,

We welcome the opportunity to speak to this inquiry concerning the "social, environmental and economic impact" of the proposed Mackenzie Valley Pipeline.

Ten Thousand Days is the name of an Ottawa inter-church group affiliated nationally with Ten Days for World Development, which has focussed chiefly on the needs of people in the developing countries - the Third World. Over the past few years, we have become more aware, that we are the descendants of exploiters. We now realize, undoubtedly, much less than we should, that the Indian and Inuit of the people now governing our nation in Africa and Asia, as well as those of the Native Peoples in Canada, have been ignored for centuries. Unless we change our attitudes, we shall follow the patterns of colonial regimes and continue to deny basic rights to the first citizens of Canada. The legal battles preceding the settlement of the Inuit and the Indians in the James Bay area, the

diagnosis of Minamata disease among Indians in Ontario and Quebec and the various presentations of representatives of the Native Peoples to your inquiry have reminded us that we also have a responsibility to support their demands for exploitation of resources that respects the rights of the first citizens of this country and for the fragile Arctic ecology.

Regrettably the history of Indians in Canada shows that policies and programs apparently intended for their protection too often denied them material resources adequate for the development of their talents. The implementation of the various treaties, in effect, may have restricted their choice: to retain their traditional socio-economic system and culture apart from the invaders who now rule this country; or to participate in a different economic system, while retaining their social customs.

STEWARDSHIP OF ENERGY RESOURCES:

The recent report by the federal Minister of Energy, Mines and Resources - An Energy Strategy for Canada - states that the "use of energy ... is essential to the attainment of a high quality of life in Canada" (p. 2). We question the justification

diagnosis of Minnesota disease among Indians in Ontario and Quebec and the various presentations of representatives of the Native Peoples to your inquiry have reminded us that we also have a responsibility to support their demands for exploitation of resources that respect the rights of the first citizens of this country and for the fragile Arctic ecology.

Regrettably the history of Indians in Canada shows that policies and programs apparently intended for their protection too often denied them material resources adequate for the development of their talents. The implementation of the various treaties, in effect, may have restricted their choice: to retain their traditional socio-economic system and values apart from the invaders who now rule this country; or to participate in a different economic system, while retaining their social customs.

STEWARDSHIP OF ENERGY RESOURCES:

The recent report by the Federal Minister of Energy, Mines and Resources - An Energy Strategy for Canada - states that the "use of energy ... is essential to the attainment of a high quality of life in Canada" (p. 2). We question the justification

of this statement; and the proportion of Canadians to which it applies. Does it apply to those who, because they live in areas of high unemployment, lack the opportunity to work for the income essential for subsistence needs of food, clothing and shelter? Does it apply to the majority of Treaty Indians, Métis or Inuit? Or does it apply chiefly to those residents of this rich land for whom home ownership and at least one car per family are taken for granted?

While it is beyond the scope of your enquiry, we submit that, conscious that energy resources are finite, the federal government should allocate sufficient funds, through the Science Council of Canada or the National Research Council to hasten the efficient development of alternative renewable sources of energy such as tidal power, wind, solar, biomass and geothermal energy.

Barbara Ward, in Only One Earth - an unofficial study commissioned for the United Nations' Conference on the Human Environment (Stockholm, 1972) said:

"Petroleum ... is on the short-supply list.

One of the most quoted estimates for usable

of this statement; and the proportion of Americans
to whom it applies. Does it apply to those who,
because they live in areas of high unemployment,
lack the opportunity to work for the income essential
for subsistence needs of food, clothing and shelter?
Does it apply to the majority of Treaty Indians,
Native or Inuit? Or does it apply chiefly to those
residents of this rich land for whom mere ownership
and at least one car per family are taken for granted?

While it is beyond the scope of your enquiry,
we submit these conclusions that energy resources
are finite, the Federal Government should allocate
efficient funds, through the Science Council of
Canada or the National Research Council to hasten
the efficient development of alternative resources
sources of energy such as tidal power, wind, solar,
biomass and geothermal energy.

Barbara Ward, in Only One Earth - an unofficial
study commissioned for the United Nations' Conference
on the Human Environment (Stockholm, 1972) said:
"Petroleum... is on the short-supply list.
One of the most quoted estimates for usable

reserves is some 2,500 billion barrels. This sounds very large, but the increase in demand foreseen over the next three decades makes it likely that peak production will have been reached by the year 2000 ... It is estimated that the Athabasca Tar Sands in Alberta, Canada, are equal to at least 300 billion barrels ... But the sheer scale of the demand for petroleum - in transport, for power stations, for the production of petrochemicals of all kinds - almost certainly means that, by the next century, it will not be available to power anything remotely like a world population of motor cars at American densities of ownership ..."

(p. 127) (*italics in original*)

Undoubtedly, much of the factual material which was discussed at the 1972 United Nations' Conference on the Human Environment was available some months earlier. Yet in 1971, the then federal Minister of Energy, Joe Greene, told us that Canada had 923 years supply of oil and 323 years of gas reserves. However, in 1974,

4

reserves is some 2,500 billion barrels. This
sounds very large, but the increase in demand
forecast over the next three decades makes
it likely that peak production will have
been reached by the year 2000. It is esti-
mated that the Atlantic Tar Sands in Alberta,
Canada, are equal to at least 500 billion
barrels. But the sheer scale of the demand
for petroleum - in transport, for power
stations, for the production of petro-
chemicals of all kinds - almost certainly
means that, by the next century, it will
not be available to power anything remotely
like a world population of motor cars at
American densities of ownership. . . .
(p. 127) (italics in original)

Undoubtedly, much of the factual material
which was discussed at the 1972 United Nations
Conference on the Human Environment was available
some months earlier. Yet in 1971, the then
Federal Minister of Energy, Joe Greene, told
us that Canada had 925 years supply of oil and
325 years of gas reserves. However, in 1974,

reports from the federal government indicate that remaining proven oil and gas reserves will be exhausted in a decade.

REAL OR CONTRIVED ENERGY SHORTAGE?

We wonder whether the oil shortage in Canada actually developed within three years, or whether the "potential shortage" in 1974 was, in part, a reflection of the concern of transnational oil companies with the successful campaign of the Organization of Petroleum Exporting Countries (OPEC) to increase the world price of oil.

Some years earlier, in 1967, Imperial Oil Ltd. an affiliate of EXXON, made known its disapproval of certain recommendations of the Carter Royal Commission on Taxation, by announcing that it would suspend a major exploration program in the Mackenzie Delta pending the federal government's decision on these proposals. A few weeks later the then Finance Minister, Mitchell Sharp, stated that there would be no major changes in the tax law affecting resource industries.

reports from the Federal Government indicate that
remaining proven oil and gas reserves will be
exhausted in a decade.

NEED FOR COMBINED ENERGY STRATEGY

We wonder whether the oil shortage in Canada
actually developed within three years, or whether
the "potential shortage" in 1974 was, in part, a
reflection of the concern of environmentalists
cooperated with the successful campaign of the
Organization of Petroleum Exporting Countries
(OPEC) to increase the world price of oil.

Some years earlier, in 1967, Imperial Oil
Ltd., an affiliate of EXXON, made known its dis-
approval of certain recommendations of the Carter
Royal Commission on Taxation, by announcing that
it would suspend a major exploration program in the
Western Delta pending the Federal Government's
decision on these proposals. A few weeks later
the then Finance Minister, Mitchell Sharp, stated
that there would be no major changes in the tax
law affecting resource industries.

In the fall of 1974, the Syncrude partners (Imperial Oil, Cities Service, Atlantic Richfield and Gulf, oil companies with headquarters in the United States) were able to use the fear of a shortfall in domestic oil supplies to negotiate better terms from the government. When Atlantic Richfield withdrew from the project, the remaining partners stated that the project would be abandoned, unless a new partner could be found. The federal government and the governments of Alberta and Ontario responded with investment loans, tax concessions, depreciation allowances and provision of infrastructure for Syncrude with a total value estimated at \$1.5 billion. Although this investment appears substantial, the governments do not exercise majority control in Syncrude.

Further, the energy industry agreed to help explore the Arctic only because the federal government offered to form Panarctic, and provide 45% of the funds required. Panarctic now is a major influence in exploration of energy resources in the North.

JOB CREATION IN THE ARCTIC:

In the fall of 1974, the Synchrotron partners
(Imperial Oil, Union Service, Atlantic Richfield
and Gulf, and companies with headquarters in the
United States) were able to use the fact of a
shortfall in domestic oil supplies to negotiate
better terms from the Government. When Atlantic
Richfield withdrew from the project, the remaining
partners stated that the project would be abandoned,
unless a new partner could be found. The federal
Government and the Government of Alberta and
Ontario responded with investment loans, tax
concessions, depreciation allowances and provision
of infrastructure for Synchrotron with a total value
estimated at \$1.5 billion. Although this investment
appears substantial, the Government's role was
majority control in Synchrotron.

Further, the energy industry agreed to help
explore the Arctic only because the federal govern-
ment offered to form a partnership, and provide 50% of
the funds required. Canadian law is a major influence
in exploration of energy resources in the North.

JOB CREATION IN THE ARCTIC

The shortage of accessible energy resources is a major reason cited by the federal government and industry representatives for approval of a Mackenzie Valley pipeline. Another is the provision of job opportunities for the Native Peoples.

But a pipeline would provide "pick-and-shovel" jobs during the construction period only.

Construction of a railway, if the need for the transportation of Arctic gas is proven, could supply two-way transportation of people and goods - to, as well as from the North. Moreover, a railway could be a continuing source of employment for people in the North. And it might be less damaging to the environment: as indicated in a study by the Canadian Institute of Guided Ground Transport, (Arctic Oil and Gas by Rail, 1974, available from the Canadian Railway Labour Association).

The overall failure of industry and government to create appropriate job opportunities which could be integrated with the traditional culture of

The shortage of accessible energy resources
is a major reason cited by the federal government
and industry representatives for approval of a
Mackinac Island Pipeline. Another is the provision
of job opportunities for the Native People.

For a pipeline would provide "high-level" jobs
during the construction period only.

Construction of a railway, if the need for
the transportation of timber has been proved, could
supply two-way transportation of people and goods -
to, as well as from the North. Moreover, a railway
could be a continuing source of employment for
people in the North. And it might be less damaging
to the environment as indicated in a study by the
Canadian Institute of United North Transport.
(Arctic Oil and Gas by Rail, 1976, available from the
Canadian Railway Labor Association).

The overall failure of industry and government
to create appropriate job opportunities which could
be integrated with the traditional culture of

Native Peoples is known. Given the gap between the technological requirements of oil and gas industry and the formal education of Native Peoples, few job opportunities could be expected to occur for them in the near future.

RECOMMENDATIONS:

Because the beliefs of the Native Peoples concerning the Mackenzie Valley Pipeline proposal have successively been presented to you by them, at other hearings, our intervention should simply indicate our firm support for them.

10,000 DAYS therefore proposes:

1. a ten-year moratorium.
2. settlement of land claims of native peoples in the Northwest Territories to effect permanent bargaining power.
3. that research on the economic development of renewable energy resources, such as wind, tidal, solar, biomass and geothermal energy, should preclude further exploitation of the North.

Native Peoples is known. Given the gap between the technological requirements of oil and gas industry and the formal education of Native Peoples, few job opportunities could be expected to occur for them in the near future.

RECOMMENDATIONS:

Because the health of the Native Peoples concerning the Mackenzie Valley Pipeline program have successfully been presented to you by them, at other hearings, our intervention should simply indicate our firm support for them.

10,000 DAYS Therefore program:

1. a temporary reservation.
2. settlement of land claims of native peoples in the Northwest Territories to effect permanent bargaining power.
3. that research on the economic development of renewable energy resources, such as wind, tidal, solar, biomass and geothermal energy, should precede further exploitation of the North.

4. that any proposal for a pipeline should be preceded by comprehensive, environmental impact studies conducted and evaluated by agencies not involved in exploitation of resources.

Thank you,

Jean Lacoursière

Jean Lacoursière, chairman
Steering Committee,
10,000 Days for World Development,
256 King Edward Avenue,
Ottawa.

This presentation will be read by Dr. H.L. Pottle.

4. That any proposal for a pipeline should be preceded by comprehensive, environmental impact studies conducted and evaluated by agencies not involved in exploitation of resources.

Thank you.

John A. Macdonald
John Macdonald, Chairman
Steering Committee,
10,000 Days for World Development,
555 King Edward Avenue,
Ottawa.

This presentation will be read by Dr. H.L. Bottin.



NATIVE COUNCIL OF CANADA

(MÉTIS and NON-STATUS INDIANS)

LE CONSEIL NATIONAL DES AUTOCHTONES DU CANADA

PRESIDENT
GLORIA GEORGE
VICE-PRESIDENT
DUKE REDBIRD
SECRETARY-TREASURER
FRED JOBIN
HONORARY-PRESIDENTS
GENE RHEAUME
A. E. BELCOURT

CS74

77 METCALFE ST., SUITE 200
OTTAWA, ONTARIO K1P 5L6

TELEPHONE 613-233-3511
TELEX 053-3301

NATIVE COUNCIL OF CANADA

PRESENTATION TO

THE BERGER COMMISSION

JUNE 4, 1976

FRED JOBIN,
SECRETARY-TREASURER

NOT FOR RELEASE UNTIL 2:00 P.M. on JUNE 4, 1976

CS74: June 4/76
Ottawa, Ontario
Fred. Jobin

NOTES FOR A PRESENTATION

BY FRED JOBIN

TO

THE BERGER COMMISSION

JUNE 4, 1976

It was late in the evening of Monday, May 17, when I began to write and to discuss this submission with a friend. I did not know then that Nelson Small Legs had been found ... dead by his own hand. Nelson's brother was reported in the newspaper to have said:

"That when his brother (Nelson) had spoken to the Berger Inquiry in Calgary last Friday, it was the straw that broke the camel's back. My brother could see what was happening to Indians in the Northwest Territories. He could see it similar to what we had 100 years ago."

The newspaper report continued:

"Nelson Small Legs had warned the Inquiry of the impact of the MacKenzie Valley Pipeline. Indians would use violence as a last resort if construction began before northern Native land claims were settled."

There is no doubt that this competent, stable, extremely sensitive young man has sent the larger society a message from Native people. Here, Mr. Berger, is what I wrote that night before I knew about Nelson Small Legs "communication."

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

It was found that the rate of reaction was first order in the concentration of the reactant and half order in the concentration of the catalyst. The rate of reaction was also found to be independent of the concentration of the solvent. The activation energy of the reaction was found to be 15.2 kcal/mole. The reaction was found to be reversible. The equilibrium constant was found to be 1.5. The reaction was found to be exothermic. The heat of reaction was found to be -10.5 kcal/mole. The reaction was found to be first order in the concentration of the reactant and half order in the concentration of the catalyst. The rate of reaction was also found to be independent of the concentration of the solvent. The activation energy of the reaction was found to be 15.2 kcal/mole. The reaction was found to be reversible. The equilibrium constant was found to be 1.5. The reaction was found to be exothermic. The heat of reaction was found to be -10.5 kcal/mole.

There is no doubt that the reaction is reversible. The equilibrium constant was found to be 1.5. The reaction was found to be exothermic. The heat of reaction was found to be -10.5 kcal/mole. The reaction was found to be first order in the concentration of the reactant and half order in the concentration of the catalyst. The rate of reaction was also found to be independent of the concentration of the solvent. The activation energy of the reaction was found to be 15.2 kcal/mole.

At a recent meeting of the Public Relations Society in Ottawa on freedom of information, someone said:

"Twenty years ago you would not have had the MacKenzie Pipeline discussed but a decision would have been made with very little public information."

It is probably a true statement.

One of the most important reasons that it is a true statement is because today we have citizens' groups which we did not have twenty years ago. Oh --- we had some citizens' groups twenty years ago, but they did not have much influence. Today, those groups have increased their membership and their drive to be heard --- and this, we believe, reflects the changing values and the changing awareness of people throughout Canada. Native people have organized themselves and are speaking out more than some other segments of the society. The reason is because Native people really do have something to say. Today there are more and more people (leaders --- academics --- ordinary citizens) who are saying much the same type of thing as Native people have been saying all along.

A very astute government saw this rising tide of concerned citizens and paid attention. Indeed, it spawned something called "participatory democracy". Out of that theme of participatory democracy, which was highlighted in the 1968 Federal election, came some policies and strategies which resulted in programs such as the Core funding program for Native associations and other groups.

The organization of the Indian Brotherhood of the Northwest Territories and the Metis Association of the Northwest Territories, for example,

5

The first part of the report deals with the general situation of the country. It is a very interesting and informative study of the country's development. The second part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development.

The third part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development. The fourth part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development.

The fifth part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development. The sixth part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development.

The seventh part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development. The eighth part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development.

The ninth part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development. The tenth part of the report deals with the specific details of the country's development. It is a very detailed and thorough study of the country's development.

coincided with the beginning of planning for the MacKenzie Gas Pipeline in the Federal Departments of Indian Affairs and Northern Development; Energy, Mines & Resources; and Environment. There was an information program which disseminated the information available, but what was somewhat shocking about the whole thing was that so much information was not available. One of the pieces of information included in that program was the information that the government was considering whether to have an inquiry under the Territorial Lands Act. That decision was made and you were appointed.

You, Mr. Berger, have insisted that certain information in the hands of the government and industry should be made available. Moreover, you decided to hold hearings in all of the settlements in the Northwest Territories and the Yukon, which would be affected by the proposed pipeline. (We know there were some very influential people who recommended against holding informal hearings in the settlements.)

These decisions of yours --- in our view, give us two fundamental requirements for what we have referred to as --- "participatory democracy". First --- citizens must have access to all the information, and second --- they must have the opportunity to discuss that information and to give back their information and opinion ... and ---- thereby participate in the decision making process in matters that affect them. You have paid very close attention to those requirements --- indeed, you have insisted on those two requirements and we must commend you because we believe that this is the first time that anybody has made a really adequate effort to create such a comprehensive participative process.

We know that flattery will get us nowhere so now we come to the crunch. Will it do any good? We have seen what has happened with regard to off-shore drilling in the Beaufort Sea. We had access to some pretty good information on this matter and, although it was not a full scale inquiry, we took every opportunity to have our say. We wrote to the Minister of Indian Affairs and Northern Development on the matter two years ago, urging him not to permit drilling. We wrote again a few months ago, reiterating that request. You may understand when I say that we have become so cynical that we now believe that it matters little what your recommendations are. They will, of course, have historical value after the pipeline is built and we have realized the "reductio ad absurdum" of our policies of greedy consumption. We seem unable to communicate --- to the politicians and bureaucrats of the Federal government --- our terror at the prospect of the destruction of Native people in the MacKenzie Valley. I know that you have heard this over and over but I believe that it cannot be said in too many ways or too often. The process of social deterioration in the MacKenzie Valley has already begun, as a result of activities which have come before the actual construction of the pipeline.

But --- something else has been happening --- there has been a resurgence of hope because of the development of the Dene Nation concept by the Dene people in the Northwest Territories. The Dene Nation concept has been completely misunderstood because of semantic difficulties and because there is a difficulty in getting certain kinds of people to think differently about the world we live in. You, Mr. Berger, listened well to the Native people throughout the North, and in the South. And, ---

I believe that you understand what we are talking about. I believe you will do your best to communicate what we have said to the government of Canada. But will the government hear? Will the federal bureaucrats hear and understand? We hope so, because we are doing our level best to get the message across in every peaceful way we know --- and can afford.

I suppose if I am to get the attention of the press, I should make extreme and ridiculous statements, like a certain public official in Fort Whoopup at the confluence of the Bow and Elbow Rivers in the Alberta foothills. I suppose, to get the attention of the press, I would have to say the Metis will take up arms and march again. Let's put this perfectly straight. We do not have an army; we do not even have a large number of people ready to go underground and practise terrorism.

I don't know all of the dynamics of how terrorists are born. I am twenty-five years of age and I find myself moving more and more towards a loss of rationality, or perhaps more properly, towards the development of, a new rationality. Perhaps my more militant friends, who are, at this point, relatively unorganized and undirected, are on the right track. Perhaps I am wrong for trying to work through the system and work to improve the system. If I cannot even make myself understood; if I cannot make somebody else understand how it feels for a whole people to lose everything their land, their language, their culture, their spirits and souls. When we talk about wishing to participate in the Canadian mosaic, and at the same time preserve our culture, we are accused of being separatists. Surely everybody knows that it is not the indigenous people of this land --- the people who were here before any Europeans came --- who are separatists. We

We came with the land; we are part of it. Why does the majority society say that we have no rights? Why, when everybody knows we used the land in a special and appropriate way? Obviously it is because of the naked self-interest of people who don't know anything about "enoughness", ---- people who only know about more ... and more ... and more ... of everything.

Sir Geoffrey Vickers talks about communication at various levels. In a talk he gave to the Third International Symposium at Expo '74 in November, 1974, he said

"Consider first the explosive extension of our power to send signals. Within my lifetime we have moved from the megaphone to the microphone; from the earliest silent film to satellite-mediated TV; from the howitzer shell to the hydrogen bomb. Let us not forget to include these last. Although threats are a low form of communication, they are an ancient and an increasingly important one. The bomb at Hiroshima was designed primarily not as an act to destroy a city but as a communication to secure the capitulation of an Empire. All our acts are also communications; and they are often more important as communications than as acts."

In addition to the lowest form of communication which he describes as "threat", he speaks about four other levels: "bargaining", "request", "persuasion", and "dialogue". Sir Geoffrey pointed out that each ascending level of communication requires each party, both to understand the other better and to trust the other more. He said

"Trust is a fruit of experience, slow to grow, quickly destroyed. It is destroyed not only by discovering deliberate deceit. It may also be eroded by discovering that the other is prone to deceive himself or simply by doubt about the rules to which the other is committed. Mistake and deceit are subtly related. But one sense of trust is of preeminent importance. The parties must trust each other to desire and seek to preserve or restore whatever degree of trust is needed, by the level of their communication."

Sir Geoffrey does not recommend communication by "threat" and neither do I. But that kind of communication happens just about everywhere in the world. I'm not an advocate of violence but if I am pushed to one side as a Native leader at, say, the age of twenty-eight, I will be forced to sit on the side lines and watch more militant men take over. I am going to have to make some decisions. I must decide whether to try to continue the fight in my own non-violent way or sit and do nothing, hoping that the non-Native majority will come to its senses and we can start over again ... or join the non-Native majority in spirit at least and just go out and get everything I can for myself now ... (without thought about the future of my grandchildren) ... or join the militants and use violence to communicate. I will have to make that decision when the time comes and the time is imminent. We Native leaders face elections every year. I face election or rejection at the end of this month.

The settlement of Dene rights is absolutely vital because the building of the pipeline, the building of highways, the building of gathering systems in the Delta, the off-shore drilling in the Beaufort Sea, the

1870-1871

1872-1873

1874-1875

1876-1877

1878-1879

1880-1881

1882-1883

1884-1885

1886-1887

1888-1889

1890-1891

1892-1893

1894-1895

1896-1897

1898-1899

1900-1901

1902-1903

1904-1905

1906-1907

1908-1909

1910-1911

1912-1913

1914-1915

1916-1917

1918-1919

the building of new airports, new towns and the immigration of thousands of non-Native southerners, will tear through the MacKenzie Valley like a tornado and rip the Native people to pieces. Out of that devastation --- a festering bitterness will grow, just as the P.L.O. grew out of the fetid refugee camps of the Palestinians. God help us, if those are the kinds of seeds that are sown in our country.

Mr. Berger, that is as far as I got that night, May 17. I felt deeply that night about those things which I said about violence as a basic kind of communication. I kept hoping that what I was saying was somehow not true. I wanted desperately to put aside the knowledge I have, (and cannot escape) as a Native leader. Knowledge about the deep and dangerous feelings of frustration felt by the people I represent.

What kind of communication did Nelson Small Legs make? It is certainly not a "threat" because the violence was against himself, nor was it any of the other levels of communication described by Sir Geoffrey Vickers. Perhaps it was a communication of an even higher level, a level which our Prime Minister understands. I just returned from the Habitat Conference in Vancouver, where the Prime Minister said

"We will thus have not only to tolerate one another but to love one another in a way that will require of us an unprecedented desire to change".

We believe that Nelson Small Legs was terrorized by the reality he saw. We believe he saw mankind going down the drain. Unless we learn to understand and trust each other, or, in Mr. Trudeau's words "love each other"- mankind is in deep trouble. What Nelson Small Legs did, he did in the interests of all people, not just Native people.

The first thing I noticed when I stepped out of the car was the cold, crisp air. It felt like a fresh blanket after a long, hot summer. I took a deep breath, savoring the scent of pine and the distant sound of water. The world seemed so quiet, so peaceful. I walked towards the lake, my feet crunching on the dry leaves. The water was still, reflecting the pale light of the sky. I stood on the shore, watching the ripples dance across the surface. It was a beautiful sight, a moment of pure tranquility.

I had heard that the lake was magical, that it held secrets and mysteries. But now, standing here, I realized that the magic was not in the water, but in the silence. The silence was a language of its own, a language that spoke of time and space, of life and death. I felt a strange connection to the water, as if it were a friend, a companion. I walked along the shore, my mind wandering. I thought of the people I had met, the places I had been. The lake was a mirror, reflecting my thoughts and feelings. It was a place of reflection, a place where I could see myself clearly.

The water was so still, so calm. It was like a giant mirror, reflecting the sky and the trees. I stood on the shore, watching the ripples dance across the surface. It was a beautiful sight, a moment of pure tranquility. I had heard that the lake was magical, that it held secrets and mysteries. But now, standing here, I realized that the magic was not in the water, but in the silence. The silence was a language of its own, a language that spoke of time and space, of life and death. I felt a strange connection to the water, as if it were a friend, a companion. I walked along the shore, my mind wandering. I thought of the people I had met, the places I had been. The lake was a mirror, reflecting my thoughts and feelings. It was a place of reflection, a place where I could see myself clearly.

I had heard that the lake was magical, that it held secrets and mysteries. But now, standing here, I realized that the magic was not in the water, but in the silence. The silence was a language of its own, a language that spoke of time and space, of life and death. I felt a strange connection to the water, as if it were a friend, a companion. I walked along the shore, my mind wandering. I thought of the people I had met, the places I had been. The lake was a mirror, reflecting my thoughts and feelings. It was a place of reflection, a place where I could see myself clearly.

Has anybody heard? If the Prime Minister heard, can he practice what he preached at Habitat? Can he take some action? Will he take some action --- or does he just talk?

During the past few months the Native Council of Canada has said very clearly to the government of Canada that some action was required with respect to Native rights and claims. We have asked for the re-affirmation of the aboriginal rights of Metis and Non-Status Native people, and as tax-paying Canadian citizens we have asked for funding which would allow us to do the necessary research to further define those rights and formulate our claims. We do not oppose the pipeline, nor do we oppose all of the development that will follow, providing that there is a settlement of Dene rights and claims prior to any further developmental activity. If exploiters are allowed to undertake these large scale activities in the MacKenzie, the Native people of Canada will consider it an act of violence by the government against approximately One Million of its own citizens. The Native people are united on this issue.

I know that many people in Southern Canada do not understand us when we describe developmental activities as violent acts. It is not possible for people in Montreal, Toronto, Winnipeg, Calgary and Vancouver to experience at first hand the conflict which takes place when they send their construction "armies" into the hinterland to take resources. Many of the people in the dominant society who do see the results of these actions are able to dismiss the whole thing by saying, simply, that anything which happens to Native people as a result of these developmental activities is the fault of the Native people themselves because they are unable to instantly change and become like the developers. Where in the world is this expected of a group

of people? Well, there are a few places, like Brazil. But we are in Canada and we have a Commission of Inquiry, and we have an opportunity to communicate with the public and with the government of Canada. So ... we will say again what it is that we want for the Dene people of the Northwest Territories and for all other Native people in Canada who are threatened by actions which will cause them big damage.

The over-all purpose of our struggle is survival. If the Dene people are to survive, they must have some control over the things that happen to them, including those things which they are constantly told are for their own good. Some of the worst things that have ever happened to us were "for our own good". We must decide what is for our own good. We must protect our own interests. History has shown us that past arrangements and existing arrangements have been totally unsatisfactory. We must have new structures which will allow the Dene people, for example, to have a land base and to run their communities in a way which, by their very means of operation, will ensure a quality life and provide for development of their culture in directions which they choose. Those directions will, of course, be determined according to our perception of reality.--- Naturally we will be constrained by the reality of our minority position in the whole of Canada. But we will insist that we will make the decisions in those geographical areas which we consider to be absolutely necessary for our survival.

What I have just said applies to those vast areas of the country which are being, or are about to be, exploited at an accelerated rate. In many other more developed parts of the country what I have said may not apply to land, except ... in certain specific cases where Native people

have lost their land as a result of fraudulent dealings. In those geographical areas (mostly in the south and in urban areas) we are seeking access to communications and educational facilities, and participative processes of government, which will allow us to maintain and develop our unique culture. We are diverse among ourselves, but vis a vis the majority society, there is a great and growing unity among us in North America and in the world.

The focus of attention is on you, Mr. Berger, and your Inquiry, because here in Northern Canada we have two great issues coming together. These are: the rights of indigenes throughout the world; and the exploitation of the biosphere.

I do not believe that I am overstating the case when I say that Canada's decision with respect to the MacKenzie Gas Pipeline is a historic moment in history of, not just Canada, but of all mankind. We have lived under the threat of a nuclear war since World War II; we have avoided that terror, but there is another kind of terror which may be even more threatening. That is, if we continue to ignore human rights (including, of course, Native rights) and to ignore the obvious fact of a finite world, we may soon vanish from the universe as a result of violence among ourselves. Understand, --- I am not speaking here about armies fighting armies; I am speaking about violence within individual cultures, such as the so-called North American culture. North Americans must now lock their doors, increase their police forces and build bigger and better prisons to protect themselves from their own people. When our tribal groups roamed this country, we did not have to protect ourselves from our own tribal members. For those North Americans who do not kill each other,

it is quite possible the rest will die from polluted water, air and food, over-use of drugs, and illness brought on by stress.

The elders among the Dene people used to live to a ripe old age. Most of them were wise, active, fun-loving, beautiful people. Many of our young people would like to become such elders. Can anyone blame us for trying to make that possible?

Return to
Mr. Gibson
C578

BRIEF TO MACKENZIE VALLEY PIPELINE INQUIRY

AT

OTTAWA, ONTARIO

ON

4 JUNE, 1976

BY

BILL SHEAD, OFFICE OF NATIVE EMPLOYMENT

C578 June 4/76
Ottawa, Ontario
Bill Shead

INTRODUCTION

By way of introduction, Mr. Commissioner, I would like to clarify my position in speaking today. I am of Cree ancestry from Manitoba. I have been in the Canadian Navy for 20 years. Since September 1975, I have been on secondment from the Department of National Defence (DND) to the Public Service Commission (PSC) as the Coordinator of the Office of Native Employment (O.N.E.).

The O.N.E. is an initiative of the P.S.C. to increase the participation of Natives (Status, Non-Status, Metis & Inuit) in policy and decision making positions in the Public Service of Canada.

In speaking today, I speak as an individual. I do not speak for O.N.E.; but rather because there is such a thing as the O.N.E.; because of my association with the O.N.E.; because of my native ancestry; and because I share the conviction of my colleagues in the O.N.E. that we, as public servants, are primarily responsible to the native public of Canada.

PURPOSE

The purpose of this brief is to highlight the lack of participation by Native people in general (and the Northern Natives in particular) in the Decision and policy making processes affecting them and ultimately all Canadians. detailing:

- a) the order of magnitude of the lack of participation
- b) what this means in the context of this inquiry
- c) what this should mean to all Canadians.

BACKGROUND DATA SOURCES

The sources of my statistical data are unclassified documents such as the P.S.C. Annual Report. In dealing specifically with the Northwest Territories (NWT) and Yukon Territories (YT), there is a wealth of material produced by the Advisory Committee on Northern Development (ACND); and specifically by the ACND Sub-Committee on the Employment of Northern Natives.

NATIVE PARTICIPATION IN THE PUBLIC SERVICE

The Public Service of Canada has approximately 72,000 officer level

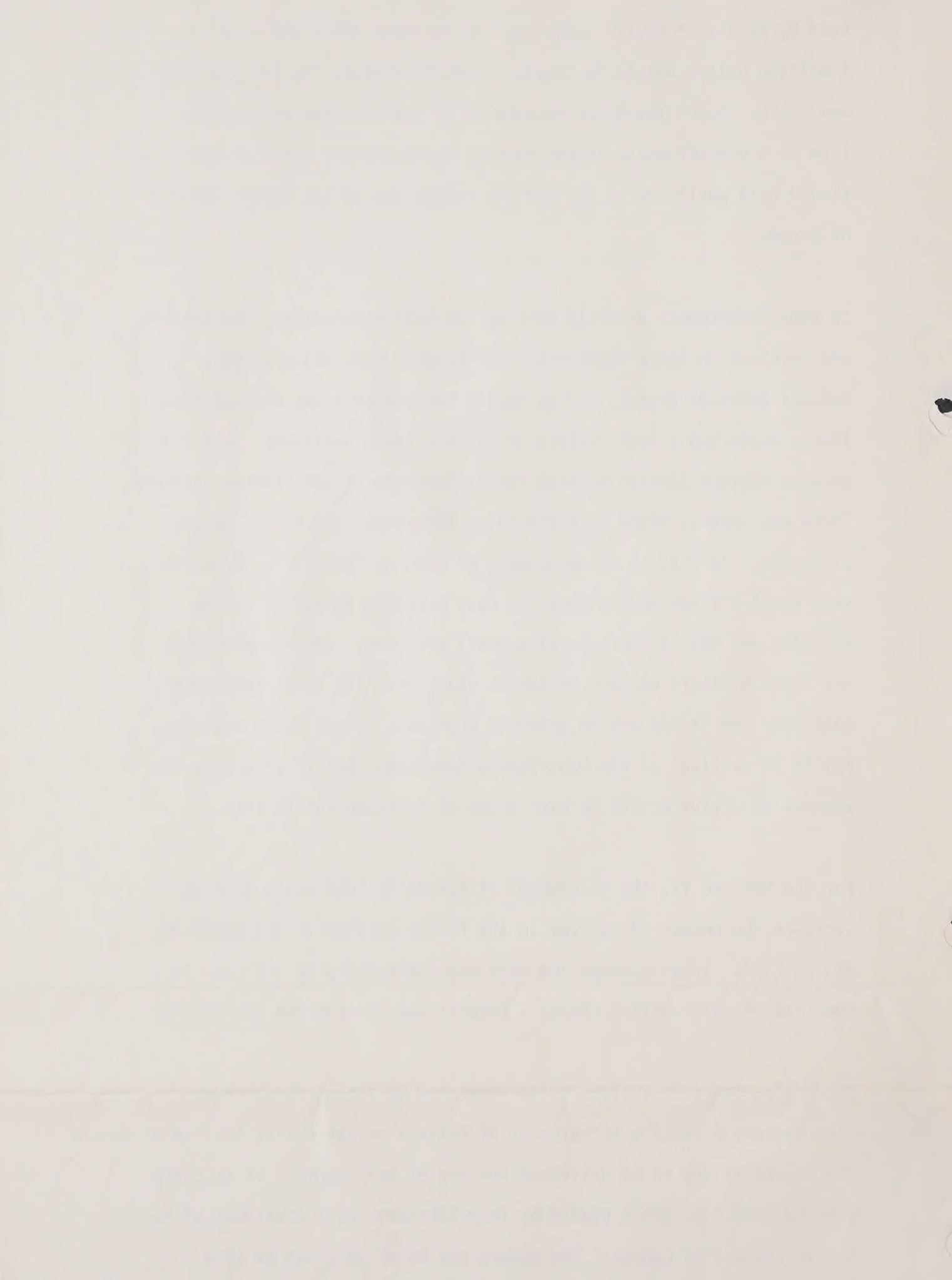


positions, of which only 348 are held by Natives. (Of these, 80% or 278 are employed by the Department of Indian & Northern Affairs). This would indicate that less than 0.5% of all officer position are held by people of native ancestry. We estimate there are over 1 million native people in Canada: 280,000 Status, 750,000 Non-Status and Metis, 18,500 Inuit) or roughly 4% of the Canadian population. Even on a proportionate representation approximately 3,000 native should hold positions in the officer categories of the Public Service of Canada.

In many Departments directly serving the Native community, few natives are involved in these responsible positions. Fore example; NHW, Medical Services Branch, Indian Health Service program, employs less than a dozen and a half Natives in officer level positions. Yet that program employs several hundred Public Servants at the officer category. There are several other such anomolies throughout the Public Service of Canada. In fact, I am an example of such an "anomoly". I am the only naval officer in the Canadian Navy (regular force) of native ancestry and one of two non-white naval officers. Staying with DND; the Royal Military College of Canada celebrates its 100th Anniversary this year and it has yet to graduate a native. I use these examples, not to be critical of the Departments concerned; but to dramatize the absence of native people in many areas of Canadian Public life.

For the NWT and YT, the Government of Canada in 1968 set a goal to increase the number of natives in the Public Service in the North to 75% by 1977. If we examine the data available today we see that less than 14% of all Public Servants - Federal and Territorial are native.

Currently, there is a study being completed by Impact Research on "The Factors Affecting Recruitment of Natives to the Public Service of Canada". The report is due to be delivered the end of this month. It is being done by IMPACT RESEARCH headed by Tony Belcourt, past president of the Native Council of Canada. The report may be of interest to this Inquiry.



NATIVE PARTICIPATION IN OTHER AREAS

This lack of participation in Public life is mirrored in the profession and industry as well. In Vancouver, before you, sir, Bill Wilson asked the question "How many Indian Doctors do you know?" We know of 7; as well as 4 lawyers, a few engineers, two or three company executives, and a few military officers. The professional associations and schools have very strict professional standards and selection procedures. Effectively, they close their schools and training opportunities to all but the rare native person.

Unions tend to be very protective of the job opportunities for their members and generally fail to accomodate the local native manpower resources. I understand your Commission is specifically examining the union issues. Additional comments here would be redundant.

Employers or managers are faced with tasks to accomplish. Generally, they recruit the best manpower from wherever to accomplish their objectives. They use the professional associations and unions to ensure he has the best. But, as a rule, he will not exploit his skill as a manager and accept the challenge of doing the job with "available" manpower.

Political parties in Canada, particularly, the federal parties, have failed to attract participation by native people. There are two natives sitting as MP's. Yet, there are several ridings in the Northern parts of the provinces with a high portion of native people. Those MP's who represent these areas, and the parties, have few natives involved in the riding organization. Few natives are employed by parties to help research positions and policies for the party. In the recent PC leadership race, one would have expected more than a few native delegates



out of the 2,500 Canadians who convened to choose the leader of the opposition. On a proportion representation base on total population one could have expected 4% or 100 native delegates.

THE NORTHERN'S RECEPTION

Given that there is little participation by natives generally, and Northern Natives specifically, in the decision and policy making areas of Public Service, the professions, the political area, and other elite Canadian institutes; what can be the Northerns perception of himself and the south!! Surely, sir, you alluded to the answer in your Corry address when you said that "we may be imposing a colonial pattern of development on our northland". I say not only colonial, but racist as well! When the dominant authority is not of the same race, surely this would Natives' perception could include a concept of "racism". If this perception exists in the citizens of the North, than certainly it exists for all Canada. As long as the idea and concept is alive in some one's mind, it must exist for all of us. Perception cannot exist without stimulus as we as southerners and Canadians provide that stimulus.

IMPLICATIONS

The lack of significant participation by native people in the general Canadian system and infrastructure indicates a failure of our system and standards to accomodate them. The systems, standards, laws, etc. Squeeze off native participation. While the system was changed to accomodate the Francophones, it has yet to change for the native, What is most important - the system and standards? or people, their ideas, and a unique contribution to Canadian life?

This country was settled by Europeans to provide equal opportunity for individuals and minority groups such as the Hutterites and Dukabors.

The immigrants to this country came here to get away from a class system. Are we creating one in Canada with our "standards" and conformity to "systems"? In the case of the native people of this country, we only

The first part of the paper discusses the importance of the study and the objectives of the research. It also provides a brief overview of the methodology used in the study. The second part of the paper presents the results of the study and discusses the implications of the findings. The third part of the paper concludes the study and provides some final thoughts on the research.

The results of the study show that there is a significant difference between the two groups. This difference is statistically significant and is not due to chance. The findings of the study have important implications for the field of research and for the practice of the profession.

The study was conducted in a controlled environment and the results are reliable. The study was conducted in a controlled environment and the results are reliable. The study was conducted in a controlled environment and the results are reliable.

have an equal opportunity to conform to standards and systems we did not help define. Will the country not allow us to participate in a re-definition of goals, standards, systems, etc?! For example, will the Canadian Forces accommodate a new standard of hair length for native people?

THE GREAT CANADIAN CONVOY

In the World War II, and in fact in Wars through out history, the convoy system was instituted for the safe and timely arrival of a group of ships and their cargo at their destination. (Canada played an important role in the trans-Atlantic convoys of WWII). It is paramount to a successful convoy, that it proceed at the speed of the slowest vessel. In this naval analogy, the natives are the slow vessel, will the rest of the Canadian convoy show to its speed? If we as native people and the Northerners specifically are sacrificed today - Who will be left in sinking in the wake tomorrow? It will only be a matter of time until the whole of Canadian society is picked one by one.

CONCLUSION

If the Canadian Convoy is to survive, it is important that the Native people of Canada survive as Native people on their terms.

The Dene as asked to determine their own destiny in the Dene Declaration. This is a cry for the convoy to slow down. The declaration is a demand for a meaningful role in determining the future of their land and our country on their own terms. Every Canadian should support that demand for the sake of the survival of the Canadian Convoy.

Sir, what I have tried to present to you, is the importance to all Canadians of in your Commission. It will certainly tell us the kind of people we are. In the fullness of time, when anthropologists are examining the remains of Canada, the races in Canada today will be one; but it will be the native who will teach the others how to be Indigenous to this land. If Canada will sacrifice the Northerners for the South in this round, Candian generally will become an "endangered species".

Submission to the Berger Inquiry

June 4, 1976

This brief is to call your attention to two concerns that appear to have been neglected in the published reports of the matters brought to your attention.

The first is that the exploitation of Arctic petroleum resources appears to be premature. In the immediate future, in the life span of generations now alive, petroleum will become too valuable for energy applications. Its future and the most important role, most certainly, is as chemical feed stocks. Northern petroleum, the only supply under control of the federal government, should be reserved for this purpose.

Immediate energy needs, until publicly acceptable nuclear energy and efficient primary energy technologies are available, should be filled by the oil which other nations are anxious to sell.

This is relevant to your inquiry since, if the point is accepted, the construction of a pipe line should be deferred. Deferral offers two prospects - that a pipe line built for feed stocks may well be smaller, and that advancing northern technology may permit a lesser social and environmental impact.

Given that a pipe line is to be constructed in the near future, it is submitted that construction should proceed without consideration of any generalized land rights purported to be held by the aboriginal population. (Construction conditions must, of course, be

This article is to call your attention to two concepts
that appear to have been neglected in the published
reports of the meeting brought to your attention.

The first is that the exploitation of atomic power-
line resources appears to be premature. In the
immediate future, in the life span of generations
now alive, petroleum will become too valuable for
energy applications. The future and the most likely
time table, some certainly, is as shown in the
attached table. The only supply under control of
the Federal Government, should be reserved for this
purpose.

Immediate energy needs, until possibly 1960, are
met by nuclear energy and efficient primary energy trans-
mission are available, should be filled by the oil
which most nations are anxious to sell.

This is relevant to your industry when, at the point
is accepted, the construction of a pipe line should
be delayed. Delayed offers two prospects - that
a pipe line built for feed stocks may well be smaller,
and that advancing nuclear technology may permit a
lesser social and environmental impact.

Given that a pipe line is to be constructed in the
near future, it is suggested that construction should
proceed without consideration of any generalized land-
rights purported to be held by the aboriginal popu-
lation. (Construction conditions must, of course, be

imposed to minimise and hopefully prevent real changes in life styles objectionable to ~~the~~ those few natives following tradition.)

This submission has two hinges:

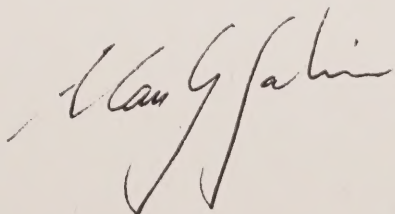
- The first is that the aboriginal population does not now, and never has, made such effective occupation and use of the specific land required by any of the several proposed pipe line routes as to establish a title thereto. Certainly no such right or title has been established as would deny the necessary land to a licensed common use.
- The second is that if such a title does exist there are no grounds in logic or in equity (or, presumably, in law) to apply a different principle of expropriation in the north than is applied in the south.

It would appear, therefore, that only two issues should properly be considered in the decision process:

- That of public necessity and convenience, and
- That of minimal disruption.

May I thank you for the opportunity to express these views,

Sincerely,



Alan G. Salvin

...to be established and possibly prevent real changes
in the legal relationship to those for whom
(Following revision.)

This amendment has two things:

- The first is that the abolition of the
not law, and never law, made such effects as
policy and use of the specific law referred to
any of the several proposed bills rather than
establish a civil statute. Certainly no such right
or title has been established as would have the
necessary lead to a licensed common law.

- The second is that it sets a civil code which
there are no grounds for logic in its equity law,
presumably, to law) to apply a different principle
of expropriation in the north than is applied in
the south.

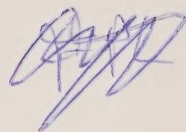
It would appear, therefore, that only two laws should
properly be considered in the decision process:

- That of public necessity and convenience, and
- That of natural disposition.

May I thank you for the opportunity to express these views,

Sincerely,

Alan D. Selvin



A Brief Submitted to
The Inquiry on the Proposed
Mackenzie Valley Pipeline

Assembling in Ottawa
June 3, 4, 5, 1976

Prepared by:

Fr. Kent Doe
Chairman, The Native Affairs Work Group
Diocese of Ottawa (Anglican)

"...alas for you Pharisees! You who pay your tithe of mint and rue and all sorts of garden herbs and overlook justice and the love of God!"...A lawyer then spoke up. "Master," he said "when you speak like this you insult us too."

"Alas for you lawyers also," he replied, "because you load on men burdens that are unendurable, burdens that you yourselves do not move a finger to lift"...

"Yes I tell you, this generation will have to answer for it all."

Luke 11: 42-51.

A Brief Submitted to
The Inquiry on the Proposed
Machamie Valley Pipeline

Submitted to the
June 2, 1976

Prepared by:
Mr. Kenneth
Chairman, The Native Affairs
House of Commons (England)

"...also for your Phosphate? You who pay your life of sweat
and use and all sorts of garden herbs and everlast flowers
and the love of God? ...a lawyer then spoke up. "Master,"
he said "when you speak like this you insult us too."

"Also for your lawyers also," he replied, "because you load
on men burdens that are unbearable, burdens that you your-
selves do not move a finger to lift..."

"Yes I tell you, this generation will have to answer for
it all."

Luke 11: 47-51.

PREAMBLE

This brief to the Inquiry on the Proposed Mackenzie Valley Pipeline comes from Anglicans who live in the Diocese of Ottawa; who, as recently as the first day of May, in the common assembly of Diocesan Synod resolved unanimously to have the Bishop of Ottawa submit to the Prime Minister the following request:

The Government of Canada, and the Governments of Ontario and Quebec halt planned development until Aboriginal claims are settled, and to initiate negotiations on the Land Claims issues without prior conditions, and taking seriously these Aboriginal Claims, and further that this Synod urges all its members to contact their Provincial and Federal representatives requesting support of this action.

Resolution of Diocesan Synod
April 29,30, May 1st 1976 in
the City of Ottawa.

We bring greetings to the officials of the Inquiry from Anglican residents who live in our diocesan family, and wish to assure you of prayers and intercessions for your work, for the Corporations, for the government decision-makers, and for the Dene people and the Inuit; for all people affected by decisions on northern development.

We are grateful for the opportunity to speak at this important Inquiry.

This brief is the result of the inquiry on the proposed Mackinac Island
Lighthouse project from the American people who live in the vicinity of
Ottawa; who, as recently as the first day of May, in the
common assembly of the House of Commons, expressed their unanimous
opinion that the Government of Canada should be the Prime Minister in
the following respects:

The Government of Canada, and the Government of
Ontario and Quebec have planned development and
Aboriginal claims are settled, and to initiate
negotiations on the land claims issues without
prior conditions, and seeking seriously to
Aboriginal claims, and further that the Government
inform all the members to contact their constituents
and federal representatives requesting support of
this action.

Resolution of the House of Commons
April 29, 1978, May 1, 1978 in
the City of Ottawa.

We bring greetings to the officials of the Inquiry from
American residents who live in our Ottawa Valley, and
wish to assure you of their interest and support
work, for the Government, for the Government's
makers, and for the people and the land; for all
people affected by decisions on northern development.

We are grateful for the opportunity to speak at this
important Inquiry.

SOME BASIC ASSUMPTIONS CONTAINED IN THIS BRIEF

1. The Anglican Church of Canada now commits more concern, more money, and more human resources, to the Native Land Settlements Issues, and sees those issues as important as other areas of church work.
2. The Anglican Church of Canada reacts positively to the Dene Declaration, and their claims with respect to the Land of the Mackenzie Valley.
3. The Christian religion, expressed through both the Bible and Tradition, is always in tension with injustice and problems associated with social, economic, and political issues, within and without the church.
4. Many historical records about the North, from the 17th Century to the present day, expose deceit, indifference, racism, and exploitation, as well as supportive actions arising out of political, religious and other corporate institutions present in the North.
5. Canadians have a duty and a responsibility to listen carefully to the words, the ideas, the voices of the native people, especially in the context of land settlement claims, and in the general strategy of development of the North.
6. The societal, cultural, and economic belief system of white man cannot, in the spirit of justice and fair play, manage the life and the resources of the North.

THE BASIC PRINCIPLES CONTAINED IN THIS WHITE

1. The religious beliefs of Canada and Canada were ancient. Both money, and some other resources, in the native land, and some other resources as important as other areas of Canada were.
2. The Anglican Church of Canada, which is positively in the hands of the Anglican, and their claims which support to the land of the Maritime Valley.
3. The Christian religion, expressed through the Bible and Tradition, is always in Canada with its history and tradition, and with its social, economic, and political history, which is always out the church.
4. Many historical records about the North, from the 17th century to the present day, show that the religious, social, and economic, as well as numerous other records which are of historical value, and other records which are present in the North.
5. Canadians have a duty and a responsibility to their country to the north, the land, the values of the native people, especially in the context of land, resources, and in the general strategy of development of the North.
6. The religious, historical, and economic beliefs of white men, and the values of the native and the life and the resources of the North.

PART ONE
Observations

Background

Authority to speak out on the subject of this Inquiry into the proposed Mackenzie Valley Pipeline, does not come from a rich and deep experience of the realities of life peculiar to the North. We whose homes are in the southern region of Canada, particularly along the Ottawa River, the St Lawrence River and eastern parts of Ontario and western parts of Quebec, must speak from an authority that arises out of concern to participate in the issues related to the proposed development of natural resources, partly because what happens in the North does affect us in many ways, and partly because geographic areas and human settlements in our region have known the effects of change in the name of energy supply. This particular submission will, hopefully, be seen as yet another public document, that supports and encourages the families, the villages, of white, of Dene, of Metis, of Inuit peoples who have spoken and written on the need for the just and fair settlement of their Land Claims issues. There are good reasons to believe that unless the appropriate government bodies halt the duality of (a) proceeding with plans to develop the north and (b) providing some rhetoric of intent to talk about and negotiate the Lands Claims issues, all people of Canada will have a great price to pay in human and natural terms - we must first act on what the Native Land Settlements issues have placed before us; there must be an authentic, complete and just dealing of all the Land Settlement issues.

With this background we observe the following:

A. The Mackenzie Valley proposals come into a setting that is filled with apprehension and mistrust; there is a stamped, well-marked impression in the total experiences of Native people that Governments of the past and the present have not acted in a trustworthy manner. What rare and exceptional moments of integrity have been displayed, are blurred by the overwhelming evidence, found in the histories of Treaties 8 and 11, that points up a long range plan to eliminate Native people, by cultural assimilation, by generational population decline, and thereby free resources - rich land for development.

B. The Land is already being developed by Oil and Gas Corporations in concert with Governments. While the Inquiry listens, other forces are at work in the North.

C. We believe that the Native Leaders and Native Associations of the North have had trouble communicating their ideas, and we see some of the reasons as:

i. Less money, less resources, less interest with respect to their story and its impact, compared to Corporation and Government propaganda.

ii. Confusion, uncertainty, impatience, persists in the difficulties arising out of two different cultures using ~~a common one~~ language.

iii. Some Native leaders appear highly motivated to remain silent.

D. We have observed the Dene people call attention to their important concerns for land which has been an intimate and blessed companion for their life style. This Brief affirms the Dene Declaration as the best starting point of serious discussion about Land Settlement issues. Although the Dene Declaration has been written off by high ranking government officials and journalists as twaddle or irresponsible material, or not even the Dene people's own words, we suggest with due respect, that the simplicity of statement contained in the Dene Declaration is of great worth, for it is set free from the never-ending pages, and baffling phrases, so endemic in linguistic gymnastics that blossoms from government departments and their consulting friends, all of which is ably substantiated in our historical records.

E. We do not observe a convincing position presented by authorities such as Arctic Gas, Trans-Canada Pipeline, that resolves the technological, environmental areas of debate related to a massive pipeline venture down the Mackenzie Valley.

F. Some day, we will need to transport natural fuel from the Arctic, but there is no proven urgency, there has been no deep involvement by the aboriginal residents and we ask that no pipeline be undertaken until time to face the land claims of the Dene people and the Inuit, and other peoples, wherever it must be done, has been taken in a just and fair way.

G. The Advisory Committee on Northern Development has no aboriginal representation, yet it is busy advising the Cabinet on Northern Development, on details and planning affecting Native territories.

H. We observe that the Dene and the Inuit speak in terms of authentic concern for their way of life and their land, the land of the Great Spirit. Proposals to build a pipeline along the Mackenzie Valley indicate little interest in such a view of the land.

11. Government, industry, business, and the public in the different states and of the different countries using a common language.

12. Some Native American people highly motivated to remain silent.

D. We have observed the same people who are active in their interest concerning the land which has been an interest and subject of discussion for many years. The land which the same people have as the best starting point of various discussions about land utilization issues. Although the same people have been written off by high ranking government officials and organizations as landless or irresponsible material, or even the same people's own words, we suggest which has respect that the majority of settlement occurred in the same settlement is of great value. For it is not from the same-ethnic groups, and families, as we have an increasing number of people who are government departments and their political friends, all of which in this subcommittee in our historical records.

E. We do not observe a completely positive picture by authorities such as Arctic Council, Trans-Canada Pipeline, and various other technological, environmental areas of debate related to a massive pipeline venture down the Mackenzie Valley.

F. Some day, we will need to transport natural fuel from the Arctic, but there is no proven urgency, there has been no deep involvement by the Aboriginal residents and we are thus no pipeline to be constructed until after the last closing of the same people and the land, and other people, whatever is must be done, has been taken in a just and fair way.

G. The Advisory Committee on Northern Development has no Aboriginal representation, and it is busy advising the Cabinet on Northern Development, on details and planning affecting Native territories.

H. We observe that the same and the Inuit speak in terms of scientific concern for their way of life and their land. The land of the Great Arctic. Proposals to build a pipeline along the Mackenzie Valley indicate little interest in such a view of the land.

Proposals

1. This Brief urges that support be given to the requests being made by the Native people; that a favourable settlement of aboriginal title be a priority, and that all proposals of development be founded on recognition of the corporate interests of the people of the land.
2. That the public be given much better, in-depth reporting on the Judicial and legal findings of such persons as Justice Morrow, and that Native People be given more room in the journals, magazines and newspapers of the south to tell their story, their way.
3. That the Inquiry into the proposed Mackenzie Valley Pipeline be encouraged to capture the vision and hopes that run much deeper than the pros and cons of industrial giants crushing a little pathway some 2000 miles along the Mackenzie Valley: whether or not such a pipeline is "worth it". Surely by now the voices are being heard - the land of the North is fragile and tough, it is unique, and it is a precious gift deeply respected by generations of its inhabitants.
4. That the philosophy, the planning, the goals, the future of the North be enriched and supported by many groups and voices of the Native People, and that the power which now resides in southern regions, specifically federal government agencies, be drastically cut, a strong representation by Native leaders be involved in the planning process.

Summary

In 1967, the General Synod of the Anglican Church of Canada produced a document on the subject of Anglican involvement among the Native People in Canada; part of the contents was an apology for the hurt and the damage done to dignity and sense of worth of Native People. By 1967 the Anglican Church knew that, with very often good intentions, the Gospel of Christ, the work of the Church, which was brought to the Native People, came decorated and clothed in a cultural garment made in the British Isles. Harold Cardinal may be right when he holds the opinion that the church has done harm which is beyond repair. But with more than one and a half centuries of the church among the Native People, of life among many communities of Native People, it is possible that the mighty powers of industry, and technology could learn a lesson from the spiritual corporations of Roman Catholicism and Anglicanism. We are learning to listen. We are learning to share. We are learning to receive the gifts offered by the Native People.

We who live in the south ought to be able to be deeply sensitive to the long term effects of dramatic change by technology. Future shock is what we are now in. The might and majesty of the St Lawrence Seaway, the great hydro project, is a case and point of local upheaval. Twenty years after the event local communities still burn with hurt and resentment, where verbal and written statements by authorities came to naught. We have witnessed the Almighty Dollar cover up the shambles of human confusion and bitterness in James Bay. We suggest that some fundamental issues are at stake, and they are much more critical than gas-propelled re-cycled metal, or winter comfort zones of 70° in homes of the south.

We see this Inquiry as a platform much wider than perhaps its designers had hoped for - it is possible that the Inquiry and all the reports that are submitted from it to the Canadian Government will be justly and carefully received. We hope that it will be so.

We have heard the voice of Native People speaking. Their voice is a choir of prophecy, a Litany of warning; and this brief is one sampling of we who live in the south, that gives assurance to our brothers and sisters in the non-native settlements, the Dene, Metis and Inuit communities, that we support their call to Justice.

1254 b24

J U S T I C E D E M A N D S A C T I O N

A statement presented to the Prime Minister and members
of the Federal Cabinet

by Canadian Church Leaders

*The Reverend N. Berner,
President, Canadian Council of Churches

✓ *The Most Reverend G. E. Carter,
President, Canadian Catholic Conference

✕ *Dr. D. C. MacDonald,
General Secretary of the Administrative Council,
Presbyterian Church in Canada

✓ *Dr. R. Nostbakken,
President, Lutheran Council in Canada

✓ *Dr. D. G. Ray,
Secretary of the General Council, United Church
of Canada

✓ *The Most Reverend E. W. Scott,
Primate, Anglican Church of Canada

March 2, 1976

INTRODUCTION

1. We thank you for this opportunity to share with you our concern for justice on issues of pressing importance. This occasion has special significance for us because it is the first time we have had the opportunity to speak with the Prime Minister and a number of Cabinet Ministers at the same time. Although we have a responsibility to minister to the personal needs of individuals, we are here today to express our pastoral concerns for justice in Canada and throughout the world.

2. We stand in the biblical tradition of the prophets where to know God is to seek justice for the poor and the oppressed. (Jeremiah 22:16) As leaders of the Christian church in Canada we are conscious of our responsibility to give witness to God's concern for justice. The church cannot remain silent on the political and social issues of the day if it is to claim obedience to Christ and His message of "good news to the poor." (Luke 4:18)

Background:

3. This is not the first time that the Canadian churches have taken a united stand on issues of social

INTRODUCTION

1. We thank you for this opportunity to share with you our concern for justice on issues of pressing importance. This occasion has opened a special opportunity for us because it is the first time we have had the opportunity to meet with the Prime Minister and a number of Cabinet Ministers at the same time. Although we have a responsibility to minister to the personal needs of individuals, we are here today to express our personal concerns for justice in Canada and throughout the world.

2. We stand in the biblical tradition of the prophets where to know God is to seek justice for the poor and the oppressed. (Isaiah 1:17) As leaders of the Christian Church in Canada we are conscious of our responsibility to give witness to God's concern for justice. The Church cannot remain silent on the political and social issues of the day if it is to claim obedience to Christ and His message of "good news to the poor." (Luke 4:18)

Background:

3. This is not the first time that the Canadian churches have taken a united stand on issues of social

justice. Our recent history of common action can be traced from the 1968 National Poverty Conference in Montreal. At that time the participants confirmed the view that the causes of poverty are rooted in the economic order and the churches made a commitment to work together for a more just society. As an expression of this commitment, the Canadian churches sent a team of observers in 1972 to the third United Nations Conference on Trade and Development in Santiago, Chile. They raised serious questions about the efforts of the government of Canada at closing the gap between rich and poor nations. In March of 1973, in conjunction with Ten Days for World Development, the churches presented a brief to Cabinet entitled "Development Demands Justice" which said in part:

The world's poor, including the poor in Canada, are outraged by the growing gap between themselves and the rich. They are demanding justice - not charity; the dignity of self-determination - not continuing dependency.¹

4. Since 1973 the churches have developed a common programme of action on:

- issues concerning population and immigration through the Inter-Church Project on Population
- issues about refugee policy through the Inter-Church Project on Chile

Justice. Our recent history of common action has
shown that the 1965 National Poverty Conference is
necessary. At that time the participants outlined the
view that the causes of poverty are rooted in the economic
system and the churches have a commitment to work together
for a more just society. As an expression of this
commitment, the Church in Canada sent a team of observers
in 1972 to the Third World National Conference on Peace
and Development in Santiago, Chile. They raised serious
questions about the effects of the government of Canada
at closing the gap between rich and poor nations. In
March of 1973, in conjunction with the Day for World
Development, the churches presented a letter to Cabinet
entitled "Development Demands Justice" which said in part:

The world's poor, including the poor in
Canada, are excluded by the growing gap
between themselves and the rich. They
are demanding justice - not charity; the
dignity of self-determination - not
condemning dependency.

4. Since 1971 the churches have developed a common
programme of action on:
 - issues concerning population and immigration through the
Inter-Church Project on Population
 - issues about refugee policy through the Inter-Church
Project on Refugees

- issues of Native Rights and Northern Development through Project North
- issues concerning world hunger and the New International Economic Order through the GATT-Fly project
- the issue of a Guaranteed Annual Income through the social action programmes of each of the denominations ✓
- issues concerning the social responsibility of corporations through the Taskforce on the Churches and Corporate Responsibility ✓
- public education concerning development through the Ten Days for World Development programme.

These projects have deepened our understanding of the issues, formulated alternative policy recommendations and implemented educational programmes among church members and the public at large.

5. Our experience has revealed many hopeful signs, especially among the many diverse groups that are struggling against injustice and for a more just sharing of power and wealth. But our experience has also taught us that all too often the power of large corporations and governments is exercised in a way which, in practice, impedes the legitimate struggles of people for the changes necessary to bring about a more just economic and social order.

- issues of Native Rights and Northern Development through Project North
- issues concerning world hunger and the New International Economic Order through the GATT-77 project
- the issue of a Guaranteed Annual Income through the social action programmes of each of the denominations
- issues concerning the social responsibility of corporations through the assistance to the Churches and Corporate Responsibility
- public education concerning development through the Ten Days for World Development programme.

These projects have deepened our understanding of the issues, formulated alternative policy recommendations and implemented educational programmes among church members and the public at large.

2. Our experience has revealed many hopeful signs, especially among the many diverse groups that are struggling against injustice and for a more just sharing of power and wealth. But our experience has also taught us that all too often the power of large corporations and governments is exercised in a way which, in practice, impedes the legitimate struggles of people for the changes necessary to bring about a more just economic and social order.

6. The continuing existence and even the growth of disparities between the rich and the poor stands in judgement of the present economic order and those who control it for their own benefit. As Canadian churches we must confess our own participation in the fruits of injustice. We ask God's forgiveness. We must continue to see our responsibility as working at the side of the victims of injustice.

JUSTICE DEMANDS ACTION

7. Social justice concerns the distribution of wealth and power. The basic question is, "Who shall control and benefit from the earth's natural resources?" Will they be used to enrich a minority as in the colonial model of development? Or will resources be used to meet the unfulfilled needs of the majority of mankind for adequate food, shelter, health care, education, and employment necessary for a fully human life?

8. The present economic order is characterized by the maldistribution of wealth and the control of resources by a small minority. In the Third World this order emerges from a history of colonialism. In Canada, in the words of

6. The continuing existence and even the growth of disparities between the rich and the poor stands in judgement of the present economic order and those who control it for their own benefit. As Canadian churches, we must confess our own participation in the fruits of injustice. We ask God's forgiveness. We must continue to see our responsibility as working at the side of the victims of injustice.

JUSTICE DEMANDS ACTION

7. Social justice concerns the distribution of wealth and power. The basic question is, "Who shall control and benefit from the earth's natural resources?" Will they be used to enrich a minority as in the colonial world of development? Or will resources be used to meet the unfulfilled needs of the majority of peoples for adequate food, shelter, health care, education, and employment necessary for a fully human life?

8. The present economic order is characterized by the maldistribution of wealth and the control of resources by a small minority. In the Third World this order emerges from a history of colonialism. In Canada, in the words of

the Senate Committee on Poverty, "the economic system in which most Canadians prosper is the same system which creates poverty." In both Canada and the Third World powerful corporations are planning the use of natural resources without the participation of the people who are most directly affected. Governments in the First, Second and Third Worlds often do not exercise their responsibility to protect people from these abuses of power. The human consequences of the present order are dependency, loss of human dignity, poverty and even starvation.

9. Today oppressed peoples are demanding an alternative to the present unjust order. The Third World is demanding a new international economic order which would enable them to pursue more self-reliant modes of development where resource use is planned to meet basic human needs. Canada's native peoples are demanding that future development in the North not be determined by colonial patterns of development wherein a powerful few end up controlling both the people and the resources.

10. In response to the demands of poor and oppressed peoples for justice we are proposing a series of policy

the Senate Committee on Poverty, "the economic system in which most Canadians prosper is the same system which creates poverty." In both Canada and the Third World powerful corporations are planning the use of natural resources without the participation of the people who are most directly affected. Governments in the First, Second and Third Worlds often do not exercise their responsibility to protect people from these abuses of power. The human consequences of the present order are dependency, loss of human dignity, poverty and even starvation.

9. Today oppressed peoples are demanding an alternative to the present unjust order. The Third World is demanding a new international economic order which would enable them to pursue more self-reliant means of development where resource use is planned to meet basic human needs. Canada's native peoples are demanding that future development in the North not be determined by colonial patterns of development wherein a powerful few end up controlling both the people and the resources.

10. In response to the demands of poor and oppressed peoples for justice we are proposing a series of policy

recommendations for government action. At the outset, we stress that these recommendations in themselves will not bring about a new order based on social justice and human needs. The creation of such an order can only be achieved with the participation of the people themselves. Nevertheless we believe that these recommendations constitute politically feasible steps to remove obstacles to the achievement of a just distribution of wealth and power.

International Development:

11. The reforms of the international trade and payments system called for in the United Nations Declaration on the Establishment of a New International Economic Order are important not because they in themselves constitute a blueprint for self-reliant development, but because they provide a context in which countries with a will to do so can more easily re-orient their domestic economy to meeting the basic needs of their population.² At the fourth United Nations Conference on Trade and Development, (UNCTAD IV), we believe that Canada is in a position to take important initiatives in the area of commodity trade and the debt problems of the developing countries.

recommendations for government action. At the same time, we stress that these recommendations in themselves will not bring about a new order based on social justice and human needs. The transfer of such an order can only be achieved with the participation of the people themselves. Nevertheless we believe that these recommendations constitute politically feasible steps to remove obstacles to the achievement of a just distribution of wealth and power.

International Development:

11. The reform of the international trade and payments system called for in the United Nations Declaration on the Establishment of a New International Economic Order are important not because they in themselves constitute a blueprint for self-reliant development, but because they provide a context in which countries will be able to more easily re-orient their domestic economy to meeting the basic needs of their population. At the Fourth United Nations Conference on Trade and Development, (UNCTAD IV), we believe that Canada is in a position to take important initiatives in the area of commodity trade and the debt problems of the developing countries.

Commodity Trade:

12. Development planning continues to be hampered by the instability and the decline in the real export earnings of developing countries. In 1975 alone the industrial world gained \$7.5 billion from the fall in the real value of the export earnings of non-oil developing countries.

13. At UNCTAD IV, we urge Canada to co-operate in establishing an integrated programme for commodity trade by:

- a) offering to contribute to the common fund for establishing buffer stocks;
- b) agreeing that the improvement of the real value of the export earnings of developing countries should be the aim of commodity agreements whatever the technical difficulties involved;
- c) agreeing to establish more liberal and more automatic compensatory financing measures, as a supplement to commodity arrangements, especially for commodity importing developing countries.

Debt Relief:

14. For developing countries, the burden of making payments on their external debts now cancels out about half the value of new assistance they receive each year.

12. Development planning continues to be hampered by the instability and the decline in the real export earnings of developing countries. In 1975 alone the industrial world gained \$7.5 billion from the fall in the real value of the export earnings of non-oil developing countries.

13. At UNCTAD IV, we urge Canada to co-operate in establishing an integrated programme for commodity trade by:

- a) offering to contribute to the common fund for establishing buffer stocks;
- b) agreeing that the improvement of the real value of the export earnings of developing countries should be the aim of commodity agreements; whatever the technical difficulties involved;
- c) agreeing to establish more liberal and more automatic compensatory financing measures, as a supplement to commodity arrangements, especially for commodity exporting developing countries.

Dale Relford

14. For developing countries, the burden of paying payments on their external debts now exceeds one-half the value of new assistance they receive each year.

Furthermore creditor nations and institutions can too easily impose conditions on debtor nations that may prevent them from pursuing independent, self-reliant modes of development.

15. At UNCTAD IV we urge Canada:

- a) to announce the forgiveness of the official development debts of the poorest and "Most Seriously Affected" countries;
- b) to accept a moratorium on the collection of debts from other developing countries;
- c) support the establishment of an International Bank for Debt Redemption to allow for the consolidation and automatic rescheduling of the debts of all developing countries without the onerous conditions on refinancing imposed by the International Monetary Fund;
- d) participate in any United Nations Conference on debt requested by the developing countries.

Transnational Corporations:

16. The federal government has a role to play in seeing that Canadian-based transnational corporations or enterprises exercise social responsibility through their operations in other countries as well as in Canada. In particular we maintain that federal government should discourage investments by Canadian-based corporations in countries which flagrantly violate human rights. For the

Furthermore creditor nations and institutions can too easily impose conditions on debtor nations that may prevent them from pursuing independent, self-reliant modes of development.

14. At WCTAD IV we urge Canada:

- a) to promote the forgiveness of the official development debts of the poorest and "least developed" countries;
- b) to accept a negotiation on the cancellation of debts from other developing countries;
- c) support the establishment of an International Bank for Debt Reduction to allow for the cancellation and automatic rescheduling of the debts of all developing countries without the onerous conditions or restrictions imposed by the International Monetary Fund;
- d) participate in any United Nations Conference on debt requested by the developing countries.

Transnational Corporations:

15. The federal government has a role to play in seeing that Canadian-based transnational corporations or enterprises exercise social responsibility through their operations in other countries as well as in Canada. In particular we maintain that federal government should discourage investments by Canadian-based corporations in countries which flagrantly violate human rights. For the

partnership between Canadian-based corporations and repressive governments of other countries means that natural resources are continuously exploited without the participation of, and benefit to, the people most affected.

17. As examples, we draw attention to the operations of Falconbridge Nickel Mines in Namibia and Noranda Mines Ltd. in Chile. When we recall the civil liberties and democratic freedoms that exist in Canada, we are greatly disturbed that the operations of these corporations in Namibia and Chile do not respect such fundamental rights as the freedom of workers to organize into unions of their choice. Canada has supported United Nations resolutions condemning the denial of human rights in Chile. Canada has also condemned apartheid in South Africa and accepted the Security Council's ruling on the illegality of South Africa's occupation of Namibia. Yet, the Canadian government allows Falconbridge to deduct from its taxes, payments made to the South African government on its operations in Namibia.³

18. We, therefore, urge the federal government to:

- a) refuse export credits, investment insurance, and assistance in obtaining international investment credits for such ventures as that

partnership between Canadian-based corporations and
representative governments of other countries means that
natural resources are continuously exploited without
the participation of, and benefit to, the people most
affected.

17. As examples, we draw attention to the operations
of Falconbridge Nickel Mines in Zambia and Northern Rhodesia
Ltd. in Chile. When we recall the civil liberties and
democratic freedoms that exist in Canada, we are greatly
astounded that the operations of these corporations in
Zambia and Chile do not respect such fundamental rights
as the freedom of workers to organize into unions of their
choice. Canada has supported United Nations resolutions
condemning the denial of human rights in Chile. Canada
has also condemned apartheid in South Africa and supported
the Security Council's ruling on the illegality of South
Africa's occupation of Namibia. Yet, the Canadian government
allows Falconbridge to deduct from its taxes, payments
made to the South African government on its operations in
Namibia.

18. We, therefore, urge the federal government to:
a) refuse export credits, investment insurance,
and assistance in obtaining international
investment credits for such ventures as that

of Noranda Mines Ltd. in Chile;

- b) implement the United Nations Decree on the Protection of the Natural Resources of Namibia which is designed to prevent the extraction of resources from Namibia by foreign corporations without the consent of the U. N. Council for Namibia;
- c) terminate the Canada-South Africa Treaty on the Avoidance of Double Taxation and the Canada-South Africa Preferential Trade Agreement.

Northern Development:

19. The Canadian North has become centre stage in a struggle to gain control of new sources of energy and minerals on this continent. Corporations and governments continue to plan the construction of power plants, pipelines, railways, highways, and mining projects without the direct participation of native peoples in the North and before a just settlement has been reached on their land claims. For a people whose land is their life, and who wish to gain control over their future economic development, a just settlement of their land claims lies at the very heart of their struggle for justice.⁴

20. We believe the federal government has a major responsibility to insist that colonial patterns of development not prevail in the Canadian North. The time

of Northern Mines Ltd. in 1911.

b) Implement the United Nations Decree on the Protection of the Natural Resources of Mining which is designed to prevent the depletion of resources from handling by foreign corporations without the consent of the U. N. Council for Economic Cooperation.

c) Terminate the Canada-British North America Treaty on the Avoidance of Double Taxation and the Canada-South Africa Preferential Trade Agreement.

Northern Development:

18. The Canadian North has become a centre stage in a struggle for the control of new sources of energy and minerals on this continent. Corporations and governments continue to plan the construction of power plants, pipelines, railways, highways, and mining projects without the direct participation of native peoples in the North and before a just settlement has been reached on their land claims. For a people whose land is their life, and who wish to gain control over their future economic development, a just settlement of their land claims lies at the very heart of their struggle for justice.

19. We believe the Federal government has a major responsibility to insist that colonial patterns of development not prevail in the Canadian North. The time

pressures for northern resource development have become enormous, particularly in the North-West Territories where the federal government retains complete jurisdiction. Steps must be taken now to achieve a just settlement of native land claims and responsible stewardship of northern resources to meet human needs and not simply the interests of transnational corporations.

21. We, therefore, urge the federal government to:

- a) introduce a moratorium on major resource development projects in the North-West Territories for the purpose of providing sufficient time to achieve the following objectives:
 - i) just settlement of native land claims;
 - ii) native peoples programs for regional economic development;
 - iii) adequate safeguards to deal with environmental problems like oil spills, well blow-outs, etc.;
 - iv) adequate programs to regulate domestic consumption and export of energy resources.

Independent studies now indicate that gas reserves south of the 60th parallel are sufficient to make such a moratorium feasible;

- b) re-examine current policy positions on the extinguishment of aboriginal title in view of the fact that the Nishga, the Dene, and the Inuit of the North-West Territories are, in various ways, asking for a formalization of their aboriginal rights. A more creative position might go a long way towards reducing tensions and assuring more constructive negotiations. Following the 1973 split decision in the Supreme Court (Calder vs. the Government of B.C.), the

presented for northern resource development have become
enormous, particularly in the North-West Territories
where the federal government retains complete jurisdiction.
Steps must be taken now to achieve a just settlement of
native land claims and responsible stewardship of northern
resources to meet human needs and not simply the interests
of transnational corporations.

11. We, therefore, urge the federal government to:

a) introduce a resolution on major resource development
projects in the North-West Territories for the
purpose of providing sufficient time to achieve the
following objectives:

- i) just settlement of native land claims;
 - ii) native peoples programs for regional economic
development;
 - iii) adequate safeguards to deal with environmental
problems like oil spills, well blow-outs, etc.;
 - iv) adequate programs to regulate domestic
consumption and export of energy resources.
- Independent studies now indicate that gas reserves
south of the 60th parallel are sufficient to make
such a scenario feasible;

b) re-examine current policy positions on the
exchange of aboriginal title in view of
the fact that the N.W.T., the Dene, and the
Inuit of the North-West Territories are, in
various ways, seeking for a formalization of their
aboriginal rights. A more creative position
might go a long way towards reducing tensions
and assisting more constructive negotiations.
Following the 1973 split decision in the Supreme
Court (Calder vs. the Government of B.C.), the

Prime Minister stated that the concept of aboriginal title was a valid one and that political settlements must ensue.

c) provide assurances that:

- i) no approval will be granted for the building of a Mackenzie Valley pipeline until the Berger Commission has submitted its final report and serious attention has been given to its findings and recommendations;
- ii) no right of conveyance will be granted to any pipeline company or other resource companies in the North-West Territories at least until there has been an agreement in principle signed on all native land claims in the North-West Territories; and,
- iii) the proposed Polar Gas pipeline or any other major energy projects will not proceed until a public inquiry similar to that of the Berger Commission hearings are conducted.

Income Distribution:

22. Although we recognize that some Canadians have achieved a degree of affluence that requires they be called upon to restrain consumption for the sake of the common good, we are acutely aware that many Canadians do not yet receive an adequate return for their labour nor a fair share of the wealth of this country. While recognizing the need to control inflation, we are concerned that the program of wage and price controls and of cutbacks in expenditures, especially on social services, will accentuate the disparities that already exist.

Prime Minister stated that the concept of
Specialized Units was a valid one and that
political arrangements must change.

c) provide assurance that:

i) no approval will be granted for the building
of a Mackenzie Valley pipeline until the
Board Commission has submitted its final
report and serious attention has been given
to its findings and recommendations;

ii) no right of conveyance will be granted to any
pipeline company or other resource company
in the North-West Territories at least until
there has been an agreement in principle signed
on all native land claims in the North-West
Territories; and,

iii) the proposed Polar Gas pipeline or any other
major energy projects will not proceed until
a public inquiry similar to that of the Taylor
Commission hearings are conducted.

Income Distribution:

25. Although we recognize that some Canadians have
achieved a degree of affluence that requires they be
called upon to restrain consumption for the sake of the
common good, we are acutely aware that many Canadians do
not yet receive an adequate return for their labor nor
a fair share of the wealth of this country. While
recognizing the need to control inflation, we are concerned
that the program of wage and price controls and of controls
in expenditures, especially on social services, will
exacerbate the disparities that already exist.

23. In recent months, there have been several shifts in the federal - provincial initiatives to establish a guaranteed income in Canada. Steps must be taken now to provide a more adequate income for families in the present welfare population and to close the gap between the working poor and the poverty line.⁵ We fear, however, that recent program initiatives may result in bringing working people into the welfare psychology and leaving present welfare recipients in that psychology.

24. We, therefore, urge the federal government in co-operation with the provinces to:

- a) create cost sharing formulas that will make it as possible for the have-not provinces to be as generous with the poor as the rich provinces;
- b) create guidelines for minimum levels of income maintenance applicable to each province and territory;
- c) simplify all application procedures for whoever is in need of "support" or "supplement";
- d) devise a means whereby those citizens in need of income assistance can be a part of the decision making and regulating of the system in which they are to be the beneficiaries. Groups of administrators, consultants, and recipients need to come together in workshops designed to review and help eradicate all aspects of the present welfare system that are considered demeaning to human dignity;
- e) re-examine the present federal tax system and introduce tax reform measures to ensure a more effective redistribution of income. Tax reform is directly linked to the whole problem of an

23. In recent months, there have been several efforts

in the federal - provincial initiatives to establish a
guaranteed income in Canada. Steps must be taken now to
provide a more adequate income for families in the present
welfare population and to close the gap between the working
poor and the poverty line. We feel, however, that recent
program initiatives may result in paying working people
into the welfare psychology and leaving present welfare
recipients in that psychology.

24. We, therefore, urge the federal government in

co-operation with the provinces to:

- a) create cost sharing formulas that will make it
as possible for the have-not provinces to be
as generous with the poor as the rich provinces;
- b) create guidelines for minimum levels of income
assistance applicable to each province and
territory;
- c) simplify all application procedures for whatever
is in need of "support" or "supplement";
- d) devise a means whereby those citizens in need
of income assistance can be a part of the
decision making and regulation of the system
in which they are to be beneficiaries.
Groups of administrators, community, and
recipients need to come together in workshops
designed to review and help eradicate all
aspects of the present welfare system that
are considered demeaning to human dignity;
- e) re-examine the present federal tax system and
introduce tax reform measures to ensure a more
effective redistribution of income. Tax reform
is directly linked to the whole problem of an

adequate, non-inflationary program that is responsive to the needs of poor people in this country.

Immigration, Population and Refugees:

25. Our world and Canada itself is characterized by an uneven pattern of economic opportunities. This has forced people to migrate within countries and across national boundaries in search of a better life.⁶ In recent years we have also witnessed the emergence of repressive regimes that do not respect even the most basic of human rights.. This too has forced many people to flee their homelands in an effort to escape from the forces of repression.⁷

26. At the present time, the federal government is engaged in a process of formulating new policies on population, immigration, and refugees. A new Immigration Act is being written, a National Demographic Policy Study has been initiated, and a review of Canada's refugee policies is underway. In formulating these new policies, we urge the federal government to adopt the following proposals:

a) That the new Immigration Act:

i) be based on a policy framework which views immigration policies for the future as an

adequate, non-inflationary program that is
responsive to the needs of poor people in
this country.

Immigration, Population and Religion

32. Our world and Canada itself is characterized by
an uneven pattern of economic opportunities. This has
forced people to migrate within countries and across
national boundaries in search of a better life. In
recent years we have also witnessed the emergence of
regressive regimes that do not respect even the most basic
of human rights. This too has forced many people to flee
their homelands in an effort to escape from the violence and
regression.

33. At the present time, the federal government is
engaged in a process of formulating new policies on
population, immigration, and refugees. A new Immigration
Act is being written; a National Geographic Policy Study
has been initiated, and a review of Canada's refugee
policies is underway. In formulating these new policies,
we urge the federal government to adopt the following
proposals:

- a) That the new Immigration Act
- 1) be based on a policy framework which views
immigration policies for the future as an

integral part of planning for a new economic and social order in Canada and throughout the world (cf. ICPOP Report on the Immigration Debate, Section 5.2); and,

ii) incorporate the specific proposals for the new legislation which were outlined in Section 5.3 of the ICPOP Report on the Immigration Debate.

b) That a review of immigration and refugee security criteria be initiated to ensure:

i) there is no political or social discrimination in the screening process;

ii) security procedures are not used as intelligence gathering instruments for Canadian or foreign intelligence agencies; and,

iii) Canada does not rely on information supplied by the police or intelligence agencies of repressive governments.

c) That fresh and immediate action towards refugees from Chile be undertaken by:

i) admitting several thousand Chileans from Argentina, where it is known that some 9,500 Chilean refugees registered with the UNHCR are presently living under conditions of harassment; and,

ii) initiating a second program to assist an additional 100 prisoners and their families to come to Canada. The churches in Canada, Argentina and Chile are prepared to assist in the implementation of these programs.

d) that the National Demographic Policy Study:

i) follow the basic principles established in the World Population Plan of Action (for which Canada voted without reservation);

ii) assure that the federal - provincial discussions about population policy be open to public scrutiny and discussion; and,

- iii) provide sufficient time and information for effective citizen participation in shaping population policies for Canada.

CONCLUSION:

27. These are not the only issues which constitute the churches' platform for social change. For example, we have recently expressed our concerns about capital punishment and the sale of CANDU reactors to repressive regimes. Through our projects, however, we intend to take the above issues to the members of our churches and to the Canadian people. We are aware that some among our church membership will resist some of the changes we have advocated, but we are prepared to inform them continually of the grounds for these positions.

28. Yet, the resistance to social change for justice today comes primarily from the relatively affluent and powerful sectors of our society. We must ask whether, as government leaders, you hear the voices of the poor as often and as effectively as you hear the voices of the rich.

29. We know that there are significant numbers of people engaged in working for social justice in this country, particularly among the poor themselves. We believe that

References for Background Documents

these people have a fundamental role to play in building a new order based on justice. It is our hope that the church will come to increasingly act in solidarity with these people and assist others in becoming involved in political action for justice.

30. Ultimately, the challenge before us is a test of our faithfulness in the living God. For we believe that the Lord is present in the struggle for justice going on in the world today and His voice must be heard.

1. Report of the Task Force on Social Security in Canada, prepared by the Department of Health and Welfare, Division of Manpower in Canada, United Church of Canada, January 1974. Also, Brief to the Minister of Health and Welfare, the Hon. R. Lalonde on the Social Service and the Proposed Social Services Act, presented by the Department of Church and Society, United Church of Canada, January 1975.

2. Report on the Immigration Debate: a study with recommendations presented to the Hon. A. J. Macdonald, for the International Project on Population (I.P.P.), November 1975.

3. Submission to the Special Joint Committee on Immigration Policy, prepared by the Interchurch Committee on Church, June 1975.

References for Background Documents

1. Cf. Development Demands Justice: an appraisal of Canada's relations with the Third World by Canadian Church leaders, March 9, 1973.
2. Cf. Reflections on the Seventh Special Session of the United Nations General Assembly: a report prepared by the GATT-Fly project, November 1975. Also, What is the New International Economic Order?, by GATT-Fly.
3. Cf. Canadian Policy Towards South Africa: an ecumencial consensus paper presented to the Hon. A. J. MacEachen and the Hon. D. C. Jamieson, November 1975. Also, Canadian Policy Towards Chile: a brief presented to the Hon. A. J. MacEachen and the Hon. R. K. Andras by the Interchurch Committee on Chile, October 1974.
4. Cf. Northern Development: At What Cost?: Labour Day Message of the Canadian Catholic Conference of bishops, September 1975.
5. Cf. Response to the Working Paper on Social Security in Canada: presented by the Department of Church and Society, Division of Mission in Canada, United Church of Canada, February 1974. Also, Brief to the Minister of National Health and Welfare, the Hon. M. Lalonde, on Social Service and the Proposed Social Services Act: presented by the Department of Church and Society, United Church of Canada, January 1976.
6. Cf. Report on the Immigration Debate: a study with recommendations presented to the Hon. R. K. Andras, by the Inter-Church Project on Population (ICPOP), November 1975.
7. Cf. Submission to the Special Joint Committee on Immigration Policy: prepared by the Interchurch Committee on Chile, June 1975.

PRESENTATION OF
W. P. WILDER
CHAIRMAN
CANADIAN ARCTIC GAS PIPELINE LIMITED
BEFORE THE BERGER INQUIRY
OTTAWA, JUNE 3, 1976



THANK YOU, SIR, FOR THIS OPPORTUNITY TO APPEAR
BEFORE YOU. I WOULD LIKE TO ADDRESS SOME OF THE
ISSUES WHICH HAVE BEEN RAISED TODAY AND THROUGHOUT
YOUR HEARINGS, ISSUES OF IMPORTANCE TO ALL CANADIANS.

FIRST, LAND CLAIMS AND THE NATIVE PEOPLE OF THE NORTH.

VERN HORTE, OUR PRESIDENT, ADVISED YOU OF OUR VIEW
ON THESE IMPORTANT MATTERS IN TORONTO AND I WANT
TO EMPHASIZE THEM AGAIN.

ARCTIC GAS HAS REPEATEDLY AND PUBLICLY URGED AN
EQUITABLE AND JUST SETTLEMENT OF NATIVE LAND CLAIMS
AT THE EARLIEST POSSIBLE DATE. THIS MUST BE SETTLED,
IN OUR OPINION, WHETHER A PIPELINE IS BUILT OR WHETHER
A PIPELINE IS NOT BUILT.

THE INDIANS AND METIS OF THE NORTHWEST TERRITORIES
PLAN TO COMPLETE THEIR PROPOSAL AND SUBMIT IT TO THE
FEDERAL GOVERNMENT THIS YEAR. WITH ALL PARTIES ACTING
IN GOOD FAITH, IT SHOULD BE POSSIBLE TO REACH A
SETTLEMENT PROMPTLY, BEFORE CONSTRUCTION OF THE
PIPELINE;

I WOULD LIKE TO REFER THOSE HERE TODAY TO REMARKS
MADE BY ARCTIC GAS TO THIS INQUIRY IN VANCOUVER,
TORONTO, EDMONTON AND HERE THIS MORNING FOR A FURTHER
APPRECIATION OF OUR VIEWS CONCERNING THE NATIVE PEOPLES
AND THEIR LAND CLAIMS.

ENERGY OPTIONS AND MORATORIUMS HAVE ALSO BEEN DISCUSSED
CONSIDERABLY AND I WOULD LIKE TO COMMENT ON THESE
ISSUES.

ONE FAILING WE ALL HAVE IS THAT SOMETIMES WE DON'T LIKE
TO FACE FACTS. RATHER, WE PREFER TO LOOK FOR SOME OTHER
COURSE OF ACTION.....TO FIND SOME EXCUSE FOR NOT DEALING
WITH A GIVEN SITUATION. WE DO THIS IN OUR PERSONAL LIVES
AND I THINK WE'VE BEEN DOING IT WITH THIS PIPELINE.

LET US LOOK AT THESE ENERGY OPTIONS.

FIRST, CONSERVATION MUST BE PRACTICED. WE CAN REDUCE THE RATE OF GROWTH IN OUR ENERGY CONSUMPTION BUT WE CANNOT REDUCE OUR TOTAL CONSUMPTION. THE FACT IS THAT OUR POPULATION IS GROWING. THE FACT IS THAT OUR LABOR FORCE IS GROWING. THE FACT IS THAT THE NUMBER OF PEOPLE WANTING THEIR OWN HOMES IS GROWING. THIS GROWTH IS NOT BASED ON EXCESSIVE LIFESTYLES. IT IS BASED ON POPULATION STATISTICS. I CAN ONLY CONCLUDE THAT CONSERVATION IS NECESSARY BUT IT IS NOT AN ALTERNATIVE TO THE DEVELOPMENT OF ADDITIONAL DOMESTIC ENERGY, NOR TO OUR PIPELINE PROPOSAL.

SECOND, I HAVE BEEN VERY IMPRESSED BY THE POPULARITY OF RENEWABLE ENERGY, AS SHOWN IN YOUR HEARINGS, MR. COMMISSIONER. SOLAR, WIND AND TIDAL POWER, ETC. WILL BE HARNESSSED SOME DAY AND I BELIEVE THAT CANADA CAN BENEFIT FROM FURTHER RESEARCH. THE FACT REMAINS, HOWEVER, THAT THESE FORMS OF ENERGY ARE NOT AT THIS POINT FINANCIALLY ATTRACTIVE, NOR ARE THEY FEASIBLE FOR WIDESPREAD APPLICATION. THEIR USE WILL INCREASE GRADUALLY BUT, AGAIN, THEY ARE NO ALTERNATIVE AT THIS TIME TO CONVENTIONAL ENERGY, NOR TO A PIPELINE.

THIRD, SOME SAY THAT OTHER CONVENTIONAL ENERGY SHOULD BE DEVELOPED, RATHER THAN DEVELOPING NORTHERN GAS SUPPLIES. CONSUMPTION OF ELECTRICITY - HYDRO AND NUCLEAR -- NOW RANKS THIRD BEHIND OIL AND GAS. THERE IS LITTLE, IF ANY, PROSPECT OF SURPLUS ELECTRICITY BECOMING AVAILABLE FOR OIL AND GAS USERS. IN ONTARIO, FOR EXAMPLE, ONTARIO HYDRO HAS ADVISED THE PROVINCIAL GOVERNMENT THAT, AFTER ALLOWING FOR CONSERVATION, THERE MAY STILL BE SHORTAGES OF ELECTRICITY BY 1980, AMOUNTING TO ABOUT FIVE PERCENT OF CURRENT CAPACITY. THIS IS BEFORE A PIPELINE COULD BE COMPLETED FROM THE MACKENZIE DELTA. IF ANY SUBSTITUTION TAKES PLACE, IT MAY BE DELTA GAS SUBSTITUTING FOR ELECTRICITY, NOT VICE VERSA.

FOURTH, YOU HAVE BEEN TOLD BY SOME THAT CANADA SHOULD CURTAIL EXISTING AUTHORIZED GAS EXPORTS. YET THE NATIONAL ENERGY BOARD HAS SHOWN IN ITS 1975 REPORT THAT THIS WOULD BUY VERY LITTLE EXTRA TIME FOR GAS USERS. IT IS NOT A 10-YEAR ALTERNATIVE AND, REGARDLESS OF TIMING, IT IS NOT AN ACTION TO BE TAKEN LIGHTLY.

FIFTH, THIS INQUIRY WAS TOLD IN CALGARY, BY MR. BLAIR, THAT HE "KNOW(S) THAT THERE ARE SUFFICIENT RESERVES OF GAS IN SOUTHERN CANADA TO MEET THE GROWING REQUIREMENTS OF THE CANADIAN MARKET FOR SOME YEARS." WE WISH THERE WERE. BUT WE WERE IMPRESSED BY THE SUBSTANTIAL BODY OF INFORMED OPINION IN ALBERTA WHICH DISAGREED WITH THIS "OPTION".

AMONG THOSE WHO DISAGREED ARE THE FOLLOWING:

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS.

THE DISTRIBUTION COMPANY -- CANADIAN UTILITIES LIMITED -- WHICH HAS THE RESPONSIBILITY OF PROVIDING GAS TO USERS WITHIN ALBERTA.

THE CITY OF CALGARY.

AND THE CITY OF EDMONTON, WHICH CONCLUDED, AND I QUOTE:

Further, this inquiry was told in Calgary, by Mr. Blair, that he "believed" that there are sufficient reserves of gas in southern Canada to meet the growing requirements of the Canadian market for some years. He said there were. But he was impressed by the substantial body of informed opinion in Alberta which disagreed with this "opinion".

Among those who disagreed are the following:

The Association of Professional Engineers, Geologists and Geophysicists.

The distribution company -- Canadian Utilities Limited -- which has the responsibility of providing gas to users within Alberta.

The City of Calgary.

And the City of Edmonton, which complained, and I quote:

"THE CITY HAS VOICED ITS CONCERN A NUMBER OF TIMES REGARDING FUTURE GAS SUPPLY, BOTH LOCALLY AND IN THE PROVINCE." IT WENT ON TO NOTE THAT THE MACKENZIE DELTA GAS WILL FLOW TO CANADIAN MARKETS OTHER THAN ALBERTA. "IT WILL HAVE THE EFFECT OF REDUCING DEMAND FOR ALBERTA GAS, THUS PROTECTING LOCAL FUTURE GAS SUPPLY."

THE CANADIAN NEED FOR MACKENZIE DELTA GAS BY THE EARLY 1980'S HAS BEEN REPEATED FROM VANCOUVER TO QUEBEC....

--BY DISTRIBUTION COMPANIES WHICH HAVE OBLIGATIONS TO THEIR EXISTING CUSTOMERS,

--BY CIVIC ORGANIZATIONS WITH OBLIGATIONS TO THE SOCIAL AND ECONOMIC WELL-BEING OF THEIR CONSTITUENTS,

--AND BY CIVIC LEADERS WITH EVEN STRONGER OBLIGATIONS FLOWING FROM THE DEMOCRATIC PROCESS.

FROM THE FOREGOING, THERE SHOULD BE LITTLE DOUBT AS TO OUR VIEWS ON PROPOSALS FOR DELAYING THE TRANSPORTATION OF MACKENZIE DELTA GAS. I WOULD LIKE TO MAKE TWO POINTS:

The City has voiced its concern a number of times regarding future gas supply. Both locally and in the province. It went on to state that the Mackenzie Delta gas will flow to Canada's markets other than Alberta. It will have the effect of reducing demand for Alberta gas. This restriction local future gas supply.

The Canadian gas for Mackenzie Delta gas by the early 1980's has been reported from Vancouver to Quebec.

--By distribution companies which have no right to their existing customers.

--By civic organizations with obligations to the social and economic well-being of their constituents.

--And by civic leaders with even stronger obligations flowing from the democratic process.

From the foregoing, there should be little doubt as to our views on proposals for delaying the transportation of Mackenzie Delta gas. I would like to make two points:

FIRST, SURELY THOSE WHO RECOMMEND A MORATORIUM ARE NOT SUGGESTING THAT UNEMPLOYMENT AND WELFARE IN THE NORTH SHOULD BE MAINTAINED FOR 10 YEARS. SURELY THEY ARE NOT SUGGESTING THAT THE HUNDREDS OF NORTHERN CITIZENS NOW EMPLOYED DIRECTLY AND INDIRECTLY IN THE INDUSTRY BE PUT ON A 10-YEAR UNEMPLOYMENT PROGRAM. I KNOW THEY DON'T INTEND THIS BUT THESE ARE TWO OBVIOUS CONSEQUENCES.

MY SECOND POINT RELATES TO CONDITIONS IN CANADA'S POPULATED AREAS. FEW PEOPLE APPRECIATE THAT MORE THAN HALF OF THE NATURAL GAS CONSUMED IN CANADA IS CONSUMED BY INDUSTRY. YOU HEARD TODAY FROM THE INDUSTRIAL GAS USERS' ASSOCIATION OF THE 35,000 PEOPLE ITS 14 MEMBER COMPANIES EMPLOY IN THEIR GAS-USING OPERATIONS. THESE EMPLOYEES WERE PAID MORE THAN HALF A BILLION DOLLARS IN 1975. IT SHOULD BE REMEMBERED THAT IGUA MEMBERS ACCOUNT FOR ONLY 15 PERCENT OF INDUSTRIAL GAS CONSUMPTION IN CANADA. SIMILARLY, THE IGUA IS THE TIP OF CANADA'S GAS-DEPENDENT EMPLOYMENT PYRAMID.

JOBS ARE ALSO PROVIDED BY THE COMMERCIAL SECTOR. INDUSTRIAL AND COMMERCIAL CONSUMPTION TOGETHER EQUAL MORE THAN 75 PERCENT OF ALL THE NATURAL GAS USED IN CANADA TODAY. ALTHOUGH MORE THAN TWO MILLION CANADIAN HOMES ARE SERVICED BY THIS FUEL, THEY ACCOUNT FOR ONLY SOME 25 PERCENT OF GAS CONSUMPTION.

CANADIANS HAVE BEEN URGED TO MODERATE THEIR LIFESTYLES SO AS TO USE LESS NATURAL GAS. SUCH SAVINGS WOULD RELATE PRIMARILY TO RESIDENTIAL CONSUMPTION, SINCE MUCH IS ALREADY BEING DONE TO CONSERVE GAS IN THE INDUSTRIAL SECTOR. FURTHER INDUSTRIAL GAS SAVINGS WOULD NECESSITATE A REDUCTION IN EMPLOYMENT. I DO NOT KNOW HOW YOU CAN ASK PEOPLE TO MODERATE THEIR RIGHT TO BE EMPLOYED.

ARCTIC GAS HAS SAID THAT THE SINGLE MOST IMPORTANT BENEFIT OF THE PIPELINE IS IN THE USE OF THE ENERGY IT WOULD TRANSPORT. AND SOME 75 PERCENT OF THE NATURAL GAS USED TODAY INVOLVES THE EMPLOYMENT OF CANADIANS. IF THIS EMPLOYMENT IS UNDERMINED BY INADEQUATE GAS SUPPLIES, CANADA'S ECONOMIC BASE IS ERODED TO THE DETRIMENT OF ALL CANADIANS, REGARDLESS OF WHERE WE LIVE OR WHAT WE BELIEVE.

I WOULD LIKE TO ADD ONE MORE OBSERVATION. FROM MY EXPERIENCE, I DO NOT THINK THAT CANADA IS CAPABLE OF PAYING \$20 BILLION TO FOREIGN COUNTRIES FOR THEIR OIL SUPPLIES OVER THE NEXT 10 YEARS, CERTAINLY NOT WITHOUT CONSIDERABLE SUFFERING. YET THAT IS WHAT WE WILL HAVE TO FACE, IF CANADA'S CONSERVATIVE ENERGY REQUIREMENTS ARE TO BE MET WITHOUT ACCESS TO NORTHERN ENERGY BY THE 1980s.

IN CONCLUSION, SIR, OUR NATIONAL WELL-BEING REQUIRES THAT DECISIONS TO TRANSPORT MACKENZIE DELTA GAS BE MADE PROMPTLY.

HAVING SAID THAT, IT IS IMPERATIVE THAT NORTHERN CONCERNS BE MET AND RESOLVED. ARCTIC GAS BELIEVES THAT THE PIPELINE DOES NOT PREJUDICE THE FUTURE OF NATIVE PEOPLES AND THEIR CLAIMS.

WE CONSIDER THAT SOME OF THE MOST IMPORTANT EVIDENCE HEARD IN THE SOUTHERN HEARINGS WAS THAT GIVEN IN MONTREAL BY THE NATIVE AND GOVERNMENT LEADERS MOST CLOSELY INVOLVED IN THE NEGOTIATIONS LEADING TO THE JAMES BAY AGREEMENT. THIS TESTIMONY RAISES THE VERY FUNDAMENTAL QUESTION WITH RESPECT TO THE RELATIONSHIP BETWEEN DEVELOPMENT AND NATIVE LAND CLAIMS. THE QUESTION IS: COULD THERE BE A SETTLEMENT IF THERE WERE NO PIPELINE PROPOSAL?

I would like to add one more observation. From my experience, I do not think that Canada is capable of paying \$20 billion to foreign countries for their oil supplies over the next 10 years, certainly not without considerable suffering. Yet that is what we will have to face, if Canada's conservative energy requirements are to be met without access to northern energy by the 1980s.

In conclusion, Sir, our national well-being requires that decisions to transport Mackenzie oil be made promptly.

He also said that it is imperative that northern concerns be met and resolved. Arctic has believed that the pipeline does not prejudice the future of native peoples and their claims.

He considered that some of the most important evidence heard in the southern hearings was that given in Montreal by the native and government leaders most closely involved in the negotiations leading to the James Bay Agreement. This testimony raised the very fundamental question with respect to the relationship between development and native land claims. The question is: Could there be a settlement if there were no pipeline proposal?

THANK YOU FOR THIS OPPORTUNITY AND WE CONTINUE TO
WISH YOUR INQUIRY WELL.

* * * * *

THANK YOU FOR THIS OPPORTUNITY AND WE CONTINUE TO
WISH YOUR INSPIRE WELL.

FERA PRESENTATION

SECOND CONFERENCE ON INDUSTRIAL ENERGY CONSERVATION

MARCH 24, 1976

OTTAWA, ONTARIO

Honourable Mr. Gillespie, Honourable Mr. Jamieson, representatives of Government and Industry, ladies and gentlemen. My name is Brian Marsden, Vice President of Operations of The Algoma Steel Corporation Limited. In attendance with me are several gentlemen who are officials of four other Canadian steel companies. As spokesman, I present the report of FERA, the Ferrous Industry Energy Research Association.

FERA is composed of five integrated Canadian steel producers:

The Algoma Steel Corporation Limited (Algoma),
Dominion Foundries and Steel Limited (Dofasco),
Sidbec-Dosco Limited (Sidbec),
Sydney Steel Corporation (Sysco),
and, The Steel Company of Canada, Limited (Stelco).

FERA was initiated two years ago to achieve coordination and unity of purpose in conducting investigation and research for more effective use of energy in the ferrous industry. It was particularly intended that this coordination would also extend to the activities of Government agencies involved in the same endeavours. The existence of FERA has proven opportune since it also provides a forum for communication between its members and the Government on the subject of energy conservation. The statements by FERA which follow represent only the collective views of its five members.

The five steel companies associated in FERA produce about 85 percent of Canada's steel. In 1974, this amounted to 12.8 million tons of raw steel which our finishing mills converted to numerous steel products for a multitude of Canadian enterprises supplying the Canadian public. Through the years since our beginnings, FERA members have invested, in aggregate, more than 2.9 billion dollars in plant and equipment. Our present activities result in the direct employment of over 54,000 Canadians. With collective annual sales of some 2.6 billion dollars, our five Canadian-owned firms make a major contribution to Canada's economy.

Manufacturing steel requires substantial amounts of energy. Energy, whether it be in the form of coal, natural gas, oil or electric power, comprises a substantial portion of the total cost of a ton of steel. As a result, the industry, over the years, has continually striven to reduce energy consumption for economic reasons. Because energy is such an important component in steel manufacturing, it is an influential factor in every investment decision involving new plant and equipment. Energy savings result in significant cost savings which, in the ultimate analysis, are beneficial to all Canadians.

The scope of operations of the FERA member companies is very broad. These companies display a wide diversity of size, product range and mix, and production techniques. Historically, the companies have demonstrated a unity of purpose in energy conservation. For example, Stelco first employed waste heat boilers in 1916 and now conserves more energy from waste heat than any steel plant in North America. Dofasco rolls its hot strip directly from the ingot obviating the need for otherwise necessary intermediate rerolling and slab reheating. Algomas has put into operation a new blast furnace, the largest in Canada, which is designed for maximum energy economy. Algoma, Sidbec and Stelco have also used the energy efficient continuous casting method of producing steel for several years. Sidbec's direct reduction process is energy efficient. Its use of electric furnaces for producing steel from iron pellets and scrap is ideally suited to the electric power available from hydro plants in Quebec. Sysco is developing the installation of a modern, energy efficient continuous casting plant.

The reputation of FERA companies for fuel efficiency is well-known in the world's steelmaking fraternity. Because iron must be extracted from its ore and because all steel processing must be done at ultra-high temperatures, the production of raw steel is energy intensive. As Canada's total steel production rises to meet forecasted growth in demand, the total energy required will increase. Conservation will favourably influence the extent of the increase.

In 1974, the FERA member companies consumed 276 trillion British thermal units (Btu's) in the production and subsequent processing of over 12.8 million tons of raw steel. This averages 21.47 million Btu's to produce and process one ton of raw steel. Details of the derivation of these statistics may be found in the Appendix.

In 1974, the major sources of energy for steel production were:

Coal	68.6%
Natural Gas	16.2%
Oil	10.0%
Electricity	5.2%

about 16.6% of all industrial energy consumption in Canada in 1973-4
Stelco is 7.5%
Stelco, Algoma and Sidbec are 11.7%

The different quantities of various energy sources depends on the type of process used by the individual FERA members. For instance, one member may use more natural gas and less coal, another vice versa, while another may use more electricity and so on. The important point is that, because of the production process adopted by the individual members, it is essential that each have access to adequate quantities of the various energy sources to maintain its traditional energy blend.

Metallurgical coal is the dominant source of energy. Its derivative, coke, fuels the blast furnaces which produce the molten iron for steelmaking. Over 85 percent of Canadian raw steel production is produced by plants using blast furnaces some of which operate with coke rates among the lowest in the world. The coal-coke cycle also produces by-product fuels which are recycled to satisfy a major portion of the remaining plant fuel needs. Blast furnaces account for 70 percent of all energy used in integrated steel plants. Because of this, it is essential that top-quality metallurgical coals be available to maintain present levels of energy efficiency.

Algoma, Dofasco and Stelco obtain most of their quality metallurgical coal from mines situated in the United States. A reduction in the availability of these coals would produce an adverse effect on present energy performance. Recently, a start has been made to bring coking coal from Western Canada, but the technical and economic problems to be resolved before significant volume use can occur are substantial and no large use of Western Canadian metallurgical coals is planned for the near future. The balance of the energy needs are filled by natural gas, oil and electricity. Natural gas and oil are generally used for heat treating and reheating functions, and for injection into blast furnaces. Natural gas and oil are also used for partially fueling open hearth furnaces and boilers to supplement recovered by-product fuels. Electricity is used by the FERA member companies for powering mill equipment and for electric arc furnaces.

Last year, Stelco put into operation a commercial-size direct reduction kiln at Red Lake, Ontario. This unit uses nonmetallurgical grade coal as the reductant. Sidbec, as previously stated, has adopted a direct reduction process which uses natural gas as the source of the reductant. In Sidbec's expanded plant, 70 percent of the iron units for steelmaking will come from this source; indicating Sidbec's dependence on natural gas. Natural gas is also imperative to the energy blends of Algoma, Dofasco and Stelco. In addition, each, as well as Sysco, depends on oil as an essential portion of its total energy use.

In essence, the FERA members depend on differing quantities of all forms of energy to make up the total energy blend of each. The necessity of adequate quantities of all forms of energy being available to the FERA companies is obvious.

The five companies in FERA forecast a reduction in energy consumption per ton of raw steel from 21.47 million Btu's to 20.77 million Btu's, a drop of 3.26 percent, by 1980. It is also forecast that with raw steel production increasing to 17.1 million tons per year by 1980, the total energy required will increase to 355 trillion Btu's. Techniques being considered on new installations to achieve the stated level of saving are:

1. improved waste heat recovery through the installation of more waste heat boilers and the installation of more advanced recuperators.
2. increased beneficiation of iron ore to reduce the impurities to be removed in the reduction stage.
3. increased use of noncondensing steam turbines in which the exhaust steam is recovered and used as process heat.
4. recovery of basic oxygen furnace off-gases in the unburned state to be used to supplement in-plant fuel systems.
5. increased use of continuous casting or direct rolling of ingots to coils to conserve energy through the reduction of heating and rolling requirements.
6. increased efforts to minimize heat loss between the steelmaking and hot rolling processes.
7. continued emphasis on employee energy awareness programs stressing the significant contribution that each employee may make to energy conservation; at work and at home.

The reduction in energy consumption per ton of raw steel is predicated on the following assumptions:

- (a) the import of good quality American metallurgical coal will continue.
- (b) the quality of raw materials used in making steel will remain constant. An increase in the impurities in these raw materials will increase energy requirements.
- (c) The availability and use of scrap will not alter. The melting of scrap does not require as much energy as processing iron ore. Drastic change in the percentage of scrap used will directly influence energy requirements.
- (d) existing environmental regulations will not be altered. More stringent regulations will increase energy use.
- (e) the facilities of the FERA members will operate at or near capacity. A low level of business produces a low level of equipment utilization, which leads to energy inefficiencies.
- (f) that active markets and profitable operations would occur so that adequate funds are available to instal new energy conserving facilities as well as environmental and growth facilities when justified.

FERA members are considering means by which energy usage might be further reduced in the years beyond 1980. The planning of such programs would be greatly assisted by the following:

- I. development of a clear long-term national energy policy arising out of increased dialogue between all governments and the major energy consuming sectors. This would ensure that the appropriate decisions on energy matters were taken at the most opportune times and that corporate planners would have some guidance in this area which is now becoming the critical variable when considering new planned investment.
- II. collaboration between government and industry toward development of a broad policy on energy saving equipment applicable to all Canadians. For example, Great Britain grants a 100 percent first-year write-off on thermal insulation costs. Or, provision of an accelerated depreciation allowance on energy saving equipment similar to the allowance now applicable to pollution control equipment.
- III. consideration of incentives for research and development on specific energy saving programs and equipment whose application would be available to all Canadians.
- IV. avoidance of unduly restrictive environmental standards which would have a significant impact on energy usage. For example, the substantial increase in electric power necessary to deal with fugitive emissions whose influence on the environment is minimal.

As a note of caution, it must be recognized that a balance exists between energy conservation and economic feasibility. As expenditures of energy saving equipment grow, a point is reached after which the expenditure of additional funds produces progressively smaller savings of energy and economic feasibility becomes questionable.

The FERA companies have a long history of energy conservation motivated by awareness that energy accounts for a substantial portion of the cost of doing business. They are committed to energy conservation in recognition of it being sound business and, as well, careful management of non-renewable natural resources. FERA's members unhesitatingly endorse and support government endeavours directed toward energy conservation. They are confident that, given government-industry cooperation in word and action, tangible energy advantages to all Canadians are attainable.

NOTES

1. The data presented displays the composite energy performance of the F.E.R.A. companies. It is the total annual consumption of energy from each source by the companies, the total annual raw steel production by the companies and, finally, the total energy per ton of steel for the calendar year specified. The data displays the net use of energy from each energy source. Energy is reported in the forms in which it is received; viz, coal, natural gas, oil and electricity. Fringe forms, such as gasoline, acetylene, propane, diesel oil used for transportation purposes and lubrication oils, are not included.
2. The data presented, except as stated in Note 5, includes the total energy employed in steel production; including the production and use of coke, iron, sinter, lime, raw steel (as cast), and in finished steel products. It does not include mining, milling, concentrating, pelletizing or transportation of ore. The energy rate against which changes in energy performance are measured is derived by dividing total energy employed by raw steel production.
3. Adjustments are made for inventory changes and only actual usage is taken into account. For example, only the coal actually employed for coke production is taken into account. Further, if more coke is produced than is employed, the excess is taken into inventory and credited to coal consumption at the Btu value of the coke. In the reverse, a net withdrawal from inventory is added to coal consumption at the Btu value of the coke. By-product energy forms are employed to the fullest extent possible and their use is not taken into account unless surplus stocks are sold or transferred into inventory; in which case, coal consumption is credited. If there is a net purchase or withdrawal from inventory, it is taken into account at its appropriate energy value and added to coal consumption.
4. In the conversion of energy source quantities to energy values, the higher heating value is used and the energy is expressed as 10^6 Btu's. Electrical energy conversion is on the basis of 3412 Btu/kwh. In the case of a public utility which generates its electricity by thermal means, the difference between the thermal energy employed and the electrical energy produced is regarded as energy consumed by the public utility.
5. The governing criterion is that the energy taken into account is that energy which crosses the corporate boundary. Note 2, preceding, is based on this principle. However, some small-scale inconsistencies occur. For example, some companies may purchase lime and the energy employed in its production is not taken into account, whereas others, which own lime kilns, do so. Similarly, companies which purchase oxygen do not take into account the energy required in its production. On the other hand, companies which own oxygen plants or provide the electricity to power them do take the energy for their operation into account.

